UNESCO

The Courier

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education and drugs

artificial intelligence

the myth of the 'hereditary enemy'

disabled children at school

the plight of the children of Islam

A time to live ...

Photo T. Takahara/WHO

Keeping in touch

Mentally handicapped children have special needs but first and foremost they are children and they share all the needs and emotions of childhood. In the past it was often felt that these children were incapable of learning or of any form of independence, but it is now known that all children can learn if taught in the right way. The development of communieation skills plays an important role in helping disabled children to become as independent as possible and find a place as young adults in the community. Above, a mentally handicapped child engrossed in learning to use the telephone.

Editorial

The International Conference on Drug Abuse and Illicit Trafficking, organized by the United Nations and held in Vienna in June 1987, marked a new chapter in attempts by the world community to combat the problem of drugs. In recognition of the importance of the Conference, the articles which open this number of the *Unesco Courier* are devoted to different aspects of the drug question including the key role of the prevention of drug abuse through education, one of the activities which Unesco has been carrying out in this field for over fifteen years.

Action on behalf of the disabled is another important field in which Unesco is co-operating in efforts to achieve goals set by the United Nations, in this case through the encouragement of educational activities to help the integration of disabled young people into schools and society at large. To draw attention to the importance of such action in fostering the personality development of disabled children and enabling them eventually to participate in society to the fullest extent, we publish a case study from Portugal which incorporates the testimony of two visually handicapped children who talk frankly about their lives.

Also in this issue, the nature of the writer's responsibility in the preservation of peace is analysed in an article by the secretary of P.E.N, the international association of writers, who examines the process whereby words can be used to create false pictures of what he calls the "hereditary enemy", and suggests ways in which writers can destroy these dangerous myths.

New light is shed on the history of urbanization by an article which recreates the historical and cultural context which saw the birth of al-Kūfah, the prototype of the Islamic city, and proposes a new approach to the place of cities in Arab Islamic civilization. Also in this issue we look at some of the latest developments in the field of artificial intelligence research and especially the astonishing horizons being opened up by the development of the fifth generation computer.

Finally, 1987 marks the bicentenary of the birth of a major figure in cultural history, Vuk Stefanović Karadžić. As a tribute to Karadžić, the father of Serbo-Croat literature who preserved treasures of the folk tradition, reformed the alphabet, and won a European reputation during his lifetime, we publish a profile of him and a short selection of extracts from his works.

Cover: Photo Jean-Eric Pasquier © Rapho, Paris.
Back cover: Map of Medina (Al-Madīna, Saudi Arabia) one of the chief holy cities of Islam. It is taken from *Description of Mecca and Medina,* a Persian manuscript (AH 982/AD 1574) by Mohyi Lari. Photo © Bibliothèque Nationale, Paris

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40th year

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The Courier
A window open on the world

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In response to growing international concern about the problem of drugs, the General Assembly of the United Nations convened an International Conference on Drug Abuse and Illicit Trafficking (ICDAIT) to meet in Vienna (Austria) from 17 to 26 June 1987, on the initiative of the Secretary-General of the UN, Mr. Javier Pérez de Cuéllar.

The goal of the Conference was to generate national, regional and international action to combat the drug problem in all its forms and define future activities on issues such as preventive education, illicit demand reduction, law enforcement, eradication of illicit sources of raw materials, and rehabilitation of drug abusers with emphasis on their integration into society. Some 2,500 delegates from governments all over the world attended the Conference, together with over 300 representatives of non-governmental organizations, in order to confront all the aspects of the drug problem in the world context.

The priority goal of Unesco's activities relating to drugs is prevention through education and public information. The importance of efforts in the field of preventive education, encouraged by Unesco, is evoked in the following article by Mme. Nicole Friderich, who was for many years responsible for Unesco's programme of education concerning problems associated with the use of drugs. The two other articles on the drug problem published in this issue present divergent, if not conflicting, analyses of this highly controversial subject. While Mr. Giuseppe di Gennaro, Executive Director of the United Nations Fund for Drug Abuse Control (UNFDAC), condemns the activities of the traffickers and producers of illegal drugs, whom he sees as the propagators of the "drug culture", French sociologist Jean Baudrillard takes the view that systematic repression is an incomplete and even dangerous response to the social problems associated with drugs, especially in the industrialized countries. Preventive education as advocated by Unesco may constitute at least a partial response to the concerns expressed by these contributors.

The logo of the International Conference on Drug Abuse and Illicit Trafficking depicts the motto of the Conference, "Yes to life, No to drugs", in the 6 official United Nations languages.

Photo R. Majewski/Unesco

Learning to live

by Nicole Friderich

PERSEVERANCE is a quality shared by all concerned with the problem of drugs. The men and women involved in law enforcement do not let themselves be disheartened by the fact that only between 10 and 15 per cent of the illicit drug traffic is intercepted as a result of their work. They continue their efforts, seek new methods, draw benefit from modern techniques, and realize the importance of active co-operation with those who are engaged in scientific research into the different drugs, treat drug users, or attempt through education to limit the harm caused by drugs and prevent drug abuse.

The scientists who study the chemical composition of legal and illegal drugs and their physical and psychological effects (about which in many cases we still know very little), therapists, doctors and psychologists, are continuing their work and in some cases making essential discoveries, such as that of endorphins a decade ago.

Neither these specialists nor social workers allow themselves to be discouraged by the fact that their devotion only achieves a "cure" in 30 per cent of treated cases of dependence on so-called hard drugs or on alcohol, which may be put in this category. They reflect on experiments that have been carried out, learn from their failures as well as their successes, compare their results, improve their methods, and unflaggingly help those who are trying to free themselves from the grip of drugs. Organizations such as Alcoholics Anonymous, whose members have succeeded in overcoming their dependence on certain substances, support and encourage those who have been unable to do so, and consider that their work should be a continuing effort. The families and friends of drug users often search unremittingly for a solution, sometimes ready to believe in a miracle; their task is a hard one.

"Nothing if not constructive, the role of educators, teachers, parents and youth leaders is to help the young and less young to develop their character and strengthen their intellectual, emotional and moral resources, to learn to learn and to learn to be."

Educators, teachers, parents and youth leaders are playing an active role in these joint efforts. Their co-operation is sought by everyone, from therapists to enforcement agents and government authorities, since the importance of their preventive efforts is appreciated. Nothing if not constructive, their role is to help the young and less young to develop their character and

strengthen their intellectual, emotional and moral resources, to learn to learn and to learn to be.

Professional educators have been trained to do this; they understand the theory and practice of teaching, psychology and technical skills. Family members have usually not had such an initiation. In their day-in, day-out task of bringing up young children, possibly not their own, to live a life which in many cases they hope will be better than theirs, they rely on their personal experience, their love, their moral or religious principles.

Efforts, notably those carried out by Unesco, to encourage all those involved in education in the broadest sense to take part in what has been called preventive education, are already bearing fruit. Those concerned with education have become aware of the role they can play and have spared neither their efforts nor their good will. Most of them have volunteered their help but have often asked "What can we do?"

One of the first tasks has been to show them the preventive effects of what they were already doing: character training, the development of a critical approach, decision-making capacities, respect for principles, and understanding of psychological mechanisms; and, of course, the transmission of knowledge of the nature and the effects of certain substances which are already studied as part of some school programmes or which have a domestic use.

It has also been necessary, and this is an essential task, to demystify the idea of drugs as magical and evil substances which have incomprehensible effects and are totally alien to their experience. Many parents and educators have come to understand the problems more fully after thinking honestly and frankly about the use of legal drugs which they take or see others take. Why do people smoke, drink, take tranquillizers, stimulants and medicines which give them a sense of well-being? Are they seeking energy, relaxation, pleasure, an escape from stress? The phenomenon of dependence is not unfamiliar to those who have watched someone try to stop smoking or drinking, or have witnessed the anguish of a person deprived of his or her usual sleeping pill or tranquillizer.

Educators have thus become more fully aware of what they already knew and have defined what they want to find out. They are not by any means seeking an encyclopaedic knowledge of the world's countless drugs (new drugs to cure illness appear every day and each one is potentially beneficial or dangerous). But they do wish to be fully informed about the substances used in their own countries and environments, products which certain groups or younger generations know more about than they do from their own experience, however biased or incomplete such "knowledge" may be.

Parents and teachers have also made it clear that they want to know how to act in time, before it's "too late". They have asked to be informed about the signs and symptoms of drug taking and quickly realized that the most important thing they can do is to be attentive to the difficulties which seem to be faced by young or older people in their family or school. They have also asked for help in forming relationships with those in distress and in making contact with those who are at risk of turning to drugs (or to other expedients).

Techniques for opening up channels of communication have been put forward to educators and they have developed others for themselves. Some have discovered the importance of active education methods, pupil participation and learning by doing. This has had a beneficial effect on their teaching as a whole. The efforts made by educators to confront an immediate problem have committed them to action and in some cases encouraged them to adopt less theoretical approaches.

But their work has not always been crowned with success. Their methods, some imported from other cultures or borrowed from other contexts, have not always been effective. In some cases quick and easily quantifiable results were expected. "Evaluations" have been made without taking into account the objectives which had been set and which could have been achieved with the means available. The authorities, in some cases, and, very often, those who agreed to finance preventive education experiments, have insisted on rapid and spectacular results—forgetting that the education of a human being takes years and that people are free agents—and, have attempted to apply to prevention strict cost-benefit criteria.

Far from being discouraged, parents and educators have continued their work. They have formed groups, shared their discoveries, experiences, disappointments and successes. They have exchanged their ideas—and the role of an organization like Unesco has been of inestimable value in this respect. This role is still developing. In all the world regions, in situations where the pattern of drug use varies widely, a growing number of initiatives in favour of preventive education are being taken. Experience and innovation are complementary. No one ever claims that a definitive solution has been found. Problems are being patiently solved as and when they arise.

Educators, families and youth leaders will continue their work. They will not abandon their efforts to prevent drug abuse since in the final analysis their motivation is love for those in their care and whom they wish to help through education to "learn to live". ■

NICOLE FRIDERICH *is a consultant in the field of preventive education at Unesco Headquarters in Paris and in various countries. She was for many years responsible for Unesco's programme for equality of educational opportunity for girls and women, and from 1972 to 1983 headed Unesco's section for education concerning problems associated with the use of drugs. She is a co-author of a new Unesco book,* Educating Against Drug Abuse.

Unesco

Unesco subscribes to the definition of a drug formulated by the World Health Organization (WHO) as "any substance that when taken into the living organism may modify one or more of its functions." This definition does not designate those who are dependent on drugs as either "abnormal" or "criminal", and has the advantage of being equally applicable to "legal" substances (tobacco, medicines, alcoholic beverages) and to those such as heroin or LSD which are proscribed by law.

Unesco turned its attention to the problems of drug abuse in 1970, in response to an appeal from the General Assembly of the United Nations. It was decided that the most valuable contribution Unesco could make would be in the areas of education, the social and human sciences and communication. The financing, directed primarily towards operational projects, was entrusted to the United Nations Fund for Drug Abuse Control (UNFDAC).

Unesco's programmes relating to drugs were drawn up in the early 1970s for the industrialized countries. Fifteen years later, at the request of the developing countries, which had begun to be affected by the growing market in legal and illegal drugs, these programmes were expanded and strengthened in order to intensify the "struggle against trafficking and the illicit use of drugs", and to promote "education for the prevention of drug abuse".

The principles governing Unesco action on drugs were defined in 1972:

- **concern was to be directed towards both illicit drugs and those which are socially acceptable (such as tobacco and commonly used medicines);**
- **drug problems were not to be looked on as problems specific to youth, if only because it is mainly adults who tend to abuse "legal" drugs and tend to be the producers of both "legal" and "illegal" drugs;**
- **a distinction would be made between action within educational systems and public information in a wider context.**

and drugs

Unesco was soon active in a number of world regions. In several Asian countries, its education and prevention programmes have been integrated into those of other United Nations agencies. Certain projects aimed at finding alternative activities to the cultivation of the opium poppy fall into this category. In Latin America and the Caribbean, where certain countries produce cocaine and cannabis, action is aimed primarily at prevention. In Africa, where until the mid-1970s the problems of drug abuse were almost non-existent, large sectors of the population were exposed to the fluctuating drug market. Under Unesco auspices, representatives of six African countries met at Lomé (Togo) in 1976, in order to devise systems of preventive education. Soon afterwards, working groups were set up in twelve countries, and courses in methodology were organized in Gabon in 1981 and in Kenya in 1983.

Among current projects:

- **two pilot programmes are being launched in Senegal and Ghana: the first stage began with the distribution of a questionnaire to assess the extent of drug abuse in both formal and out-of-school education;**
- **the publication (in English and French) on the occasion of the United Nations International Conference on Drug Abuse and Illicit Trafficking (Vienna, June 1987), of a book entitled *Educating Against Drug Abuse* (see inside back cover);**
- **the production of an audiovisual montage on *Young People and Drugs* for those concerned with teaching young people in danger of becoming dependent on drugs;**
- **the analysis of audiovisual messages and assessment of their impact on drug prevention campaigns;**
- **continuing co-operation with non-governmental organizations, particularly with some sixty international youth organizations.**

'A perverse logic'

by Jean Baudrillard

DRUGS in general no longer form part of the shared values and symbolic rituals of modern industrial societies, which are dedicated to deferred gratification and ulterior purposes which call for a calculated sacrifice of time and energy. The use of drugs, on the other hand, always implies an immediate mental process and the attainment of a kind of utopia. All schools of thought (including religious thought) which have favoured the immediate attainment of utopia have been declared heretical and condemned as such through the ages.

Traces of this long-standing condemnation linger on in our own vision of modern drugs and of the occult power they derive from their ancient symbolic virtues. They simultaneously fascinate, repel and terrify, and their ambivalence is virtually definitive, posing a problem that Western reason finds insoluble; they "dope" bodies and brains and have the same effect on our judgment of what they are.

Drugs were long held—and are still held in current analytical thinking—to be "anomic", in Durkheim's sense of the term,[1] like a certain type of suicide which is itself characteristic of the social structures of industrialized countries. Such phenomena are residual, marginal, beyond the pale of the law, outside the overall pattern of organization and the value-system of the group. Peripheral though they are, they do not call in question the principle of law and values as such, and it is not unknown for laws and values to absorb and integrate them.

Today, the status of drugs seems to me to be totally different, along with other specifically contemporary phenomena which I shall call, not anomic, but *anomalous*. By this I do not mean something marginal, the expression of an imbalance or the organic deficiency of a system, but the result of an excess of organization, of an excessive concern with balance, regulation and rationalization in a given system. Such a phenomenon, seemingly extraneous, conflicts with the workings of the system, for no apparent reason, but in fact it is a consequence of the very logic of the system, of the excessive logic and rationality of a system—in this case society in the industrialized countries—which, having reached a certain level of saturation, secretes antibodies which express its internal diseases, its strange malfunctions, its unforeseeable and incurable breakdowns—in a word, its *anomalies*.

In such systems this is not the result of society's inability to integrate its marginal phenomena; on the contrary, it stems from an overcapacity for integration and standardization. When this happens, societies which seem all-powerful are destabilized from within, with serious consequences, for the more efforts the system makes to organize itself in order to get rid of its anomalies, the further it will take its logic of over-organization, and the more it will nourish the outgrowth of those anomalies.

1. The term *anomie*, as coined by the French social scientist Emile Durkheim (1858-1917), denotes the condition of a society or a social group which results when its members are deprived of norms or standards of behaviour and of ideals which give meaning to their aspirations. *Editor*

A Finnish poster in favour of "Good human relations without drugs"

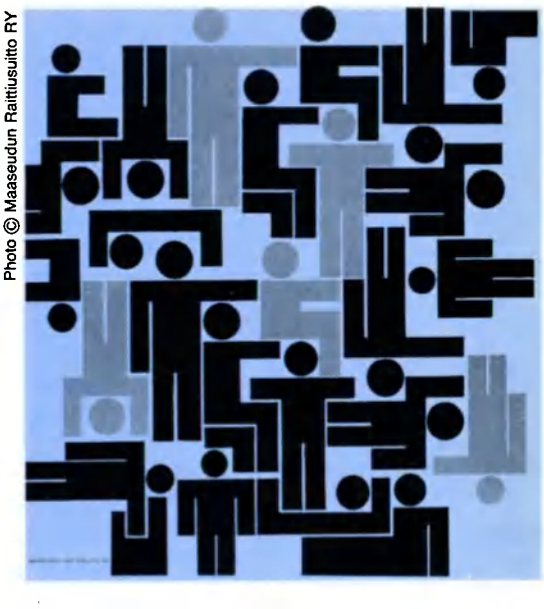
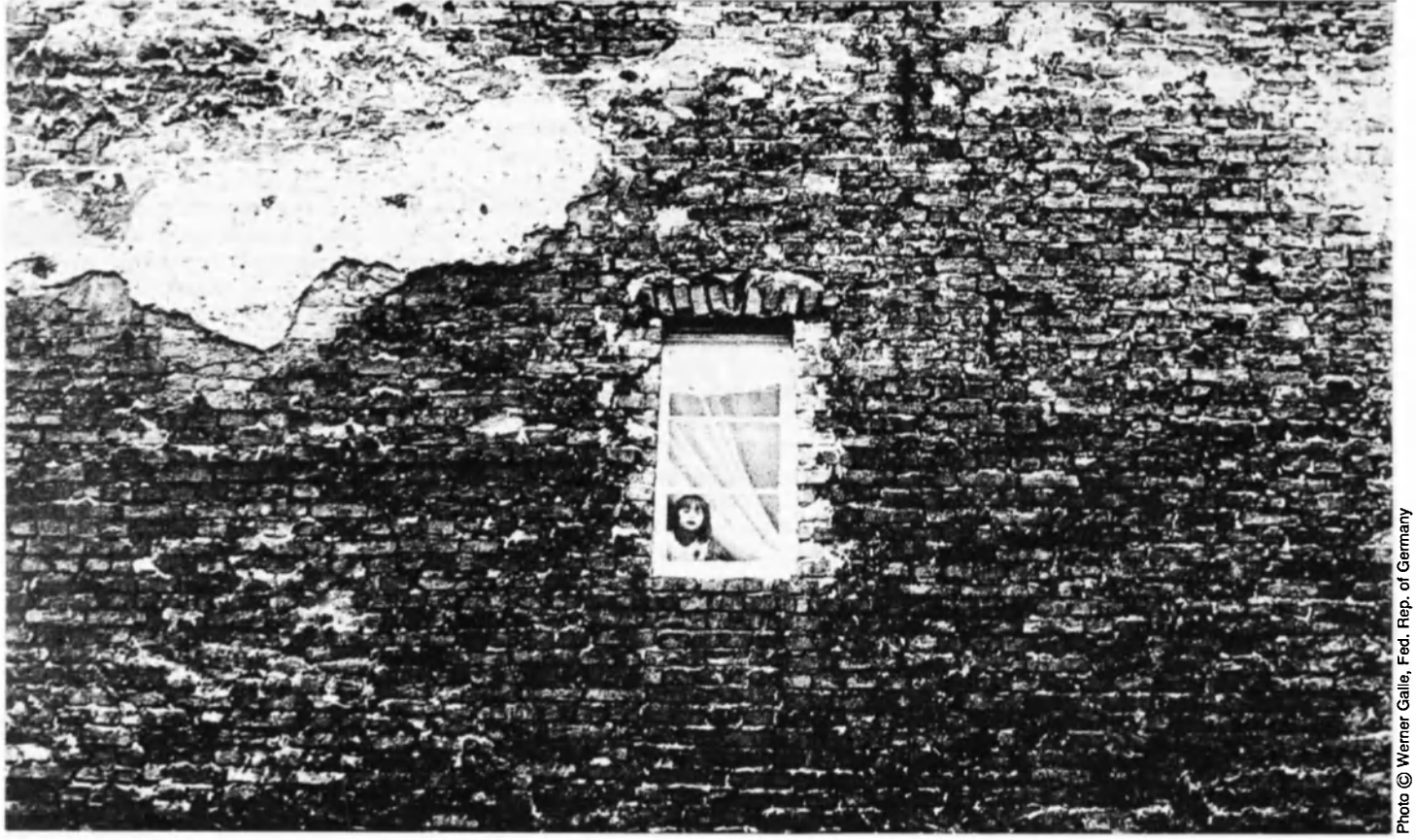


Photo © Maaseudun Raittiusuilto RY



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"All drugs, hard or soft, including tobacco, alcohol and all modern variants, are a means of exorcism: they exorcise reality, the social order and callous indifference."

A naively rationalist (educational and therapeutic) conception of these systems must be discarded (and this applies not only to social systems but also to cybernetic and computerized systems). In the past, the existence of anomic peripheries prompted the system to become even more rationalized, but today it is the over-rationalization of the system which causes and strengthens anomalous developments.

This "perverse" logic must be taken into account and a distinction must be made between drug-taking connected with economic and social underdevelopment (as it still is in developing countries or, in the case of alcohol, in underprivileged classes) and drug-taking linked to the saturation of the consumer society. The latter type began to emerge in the 1960s in the industrialized countries, as both the apogee of consumption and a parody of it, as an anomaly which challenged a world that had to be escaped from because it was *too full,* not because it lacked something. Perhaps there is a lesson here for developing societies, which are still ambivalent in terms of their organization.

In these countries, then, we are dealing with drug use of what might be called a "second order" which should not be confused with the other type, for neither its limits, nor its characteristics nor, obviously, its prevention, will be the same. In particular, we must consider the problem of drugs in connection with all the "second order" phenomena which are contemporary with it and which follow the same "anomalous" logic. We must look at the various types of "second order" violence, which do not stem from straightforward delinquency or aggression, but from a reaction against the excessive tolerance of industrialized society and the over-protectiveness of the social fabric. Terrorism certainly belongs to this type. It is a form of response to the omnipotence of modern States, which secrete it no longer as historical violence, but as anomalous violence, which, moreover, they cannot suppress, except by turning themselves into States which are even more powerful, more controlled and more coercive, thereby perpetuating the vicious circle.

We must take account of such types of "second order" pathological phenomena as AIDS and cancer, which are not traditional diseases due to the organic deficiency of bodies exposed to an attack from outside, but a consequence of the destabilization of over-protected bodies (over-protected by all our hygienic, chemical, medical, social and psychological prostheses), which thereby lose their immunity and become a prey to any virus. Just as there is apparently no "political" solution to the problem of terrorism, for the time being there seems to be no biomedical solution to the problem of AIDS and cancer—and for the same reason. These are, in fact, anomalous occurrences, turning with savage, reactive violence against the political or biological over-control of the body, whether it be the social or the individual organism.

Such phenomena spring from a "darker side" of human experience. Drug use and abuse form part of this syndrome. The existence of this darker side and the behaviour resulting from it may be deplored but its symbolic necessity cannot be denied. As the French writer Georges Bataille has shown, the darker side ("*La part maudite*") plays a fundamental role in most societies, in ways which may be more or less explicit.

One thing is certain: a society that attempts to purge itself entirely of this darker side runs a very great risk. Such a desire nevertheless forms part of the rationalist paranoia of the social systems of industrialized countries. The negative aspects of this darker side are, admittedly, important and should not be ignored, but they should be set against the far more serious loss that might result from its destruction. Such an act would generate cancers and viruses that would be far more malignant and would not even have the charm of malediction to recommend them.

This is the crux of the ambiguity and the paradox of drugs: in some countries drug-taking is a symptom of the collective loss of immune defences or of the individual loss of symbolic defences—a situation in which some societies become vulnerable to terrorism, drug addiction and violence (but also to depression or to fascism). And it is obvious that the only solution would be to restore those immunities and those symbolic defences. But in the West we also know that we live in a system which is tending, in the very name of science and progress, to destroy all natural immunities and to replace them with substitute systems of artificial immunity.

Why should we expect such a system to change direction? And now we see the use of drugs from another, exactly opposite, angle: while it is part of the immune deficiency syndrome, it is itself a defence. Better defences may exist, but it is possible

to speculate (for we must respond to such an insoluble state of affairs with paradoxical hypotheses) that the use and abuse of drugs may be a vital and symbolic reaction, however despairing and suicidal it may seem, against something still worse.

Without by any means yielding to the temptations of the over-optimistic ideology in the West during the 1960s and 1970s concerning the "expansion of consciousness", there are grounds for thinking, much more prosaically, that this is not only an impulse to flee from the objective process of brutalization that life in some societies may be, but a collective movement of avoidance, a shared reflex of flight from the universal standardization, rationalization and regimentation which undoubtedly constitute, in the long term, a much more serious danger to society and to the human race. We know that individuals use neurosis as an effective protection against madness; similarly, it is possible to use, not absolute good, but relative evil, as a defence against absolute evil. The Church has coped with its heresies in the same way, by treating them as necessary (from its point of view) aberrations, as harmful offshoots (but offshoots nevertheless). A Church which no longer generates heresies or which has stamped them all out begins to wither, just as a body which no longer produces any kind of offshoots, including those which work for its destruction, is a dead body.

That said, drug-taking in the industrialized countries is no longer in its intensive phase, the phase sustained by euphoric or glorifying rhetoric, whether subversive or suicidal. It is in its extensive phase: while it is spreading and gaining ground, it is in the process becoming less virulent for society. It is no longer a more or less subversive type of anomy, but an anomaly which is becoming institutionalized.

How should we react to this process of familiarization? Should we fight it even more strenuously? A hard new anti-drug philosophy (now that there is no longer any philosophy of drugs) may seem problematic. In this state of precarious balance, or imbalance, of the immune system of society and of the individual, where drugs play an ambiguous role, such an approach introduces a rigid moralizing element, a rigid dichotomy between law and anomy which is no longer appropriate for the delicate management of anomalies (this rigidity is, moreover, itself highly ambiguous, since it is often a disguise for political strategies in which drug-taking, like any other form of delinquency, is used as an easy alibi).

It is imperative to realize that the problem of drug-taking must be approached with *sensitivity*, and (because it is an ambiguous problem) with strategies that are themselves ambiguous. The best form of prevention is to introduce a symbolical element into the social strategy, a difficult undertaking which involves flying in the face of today's excessive rationalization and social organization. Lack of a ready-made solution does not spell failure, and we must at all costs avoid clear-cut, unilateral strategies of denunciation, whereby one kind of society takes complacent refuge in its own hypocrisy. Drug-use is a question to which there are no glib answers. Nor should too hasty a distinction be drawn between drug use and abuse: no one could trace clearly the unstable boundaries between them.

All drugs, hard or soft, including tobacco, alcohol and all modern variants, are a means of exorcism: they exorcise reality, the social order and callous indifference. But it should not be forgotten that, through drugs, society itself exorcises certain forgotten powers, certain drives, certain inner contradictions. Exorcism is production for the sake of rejection. Society produces this effect, and society condemns it. Failing the ability to stop producing it (which is considered desirable), society should at least cease to condemn it. ■

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Photo Nancy Socaras/Unesco

Giving young people help and support is an essential part of a preventive approach to the drug problem.

How should we attack the drug problem?

by Giuseppe di Gennaro

THE increase in drug dependence among young people is creating exacting new problems for educators, who need to grasp the true nature and scope of the phenomenon in order to carry out their duties.

The non-medical use of drugs has always existed, but in forms which have little in common with drug dependence among young people as we know it today.

Historical and anthropological research has shown that in the past drug-taking was almost always confined to adults. Adolescents were never involved. Drugs were taken sporadically for mystical, religious or ritual purposes, and only by certain groups and in certain circumstances. The important thing about the practice and purpose of these forms of drug taking was the absence of dependence.

Later, when morphine, heroin and cocaine began to be used, there were cases of addiction among adults, but until the mid-1960s the numbers involved were so small that the phenomenon never reached a socially significant scale and on the whole attracted little attention.

It was not until the late 1960s that drug abuse began to make inroads among young people and children and eventually became a world problem, as uncontrollable waves of epidemic proportions swept from continent to continent.

It is therefore both mistaken and dangerous to assume that the present situation is simply the continuation of the past. It is mistaken because only today have drugs become a culture which everyone must face. It is dangerous because it makes people less vigilant and encourages passivity and acceptance. We expect that the damage will be limited and that the community will continue to take things in its stride as it has done over the centuries.

Educators must take stock of the dangers that drugs represent for children and adolescents today, foresee possible future developments, understand the causes of the situation and the forces underlying it, and introduce appropriate remedial measures into the educational process. This is an arduous task, as can be seen from the persistence and increasing gravity of drug dependence in spite of the determination of many educators and the hard work they have done in the last twenty years.

The subject has been exhaustively discussed. Whole libraries of books have been devoted to it, written by specialists in every branch of knowledge; research has been carried out by highly qualified authorities and organizations; innumerable conferences and meetings have been held, both local and international; but the guidelines for reliable and effective educational defence measures have still not been clearly and unequivocally defined.

It is thus vital to continue our efforts to understand the situation and deal with it more effectively. The purpose of this article is to stimulate critical reflection about certain widely held beliefs. There is a risk that such beliefs may be considered to be absolutely true, although they are not, and be taken, wrongly, as a basis for educational theory and practice, now and in the future.

These beliefs all stem from the assumption that drug dependence among young people is due to factors caused by the changes and tensions of modern society. In accordance with this assumption various situations have been singled out and blamed for the spread of drugs. An exhaustive list of these situations would be extremely long and is unnecessary for our purpose. We shall merely point out certain widely accepted allegations.

The first comes under the heading of

This French poster is a still from a short film produced for showing on TV and in cinemas as part of an anti-drug campaign. Intended for 10- to 13-year-olds, the film was made to encourage young people to resist approaches from drug-pushers.

"youthful protest". It has been maintained that young people at a certain stage refused to be dominated by the adult culture, which in their view was entangled with profit-making and the status quo, and reacted against the idea of being excluded from the construction of the future society in which they would have to live. This reaction turned into confrontation and struggle, and the anger that in some countries culminated in the disturbances of 1968 was accompanied by the development of a general attitude of rejection of adult behaviour and values. Drug abuse was essentially a deliberate insult and provocation on the part of young people towards adults.

The correlation between the spread of drug dependence and youthful protest seemed convincing because the connection appeared to be logical and because the two phenomena occurred at the same time. Youthful protest lost its impetus within a few years and was inevitably followed by a general feeling of defeat, resignation and disengagement from society. This second phase was also accompanied by drug dependence. Specialists have stressed the importance of detachment and the flight from reality in drug abuse, and have proposed another causal hypothesis without paying much attention to the fact that it is the antithesis of the first.

Meanwhile, in some societies an extreme form of consumerism was developing at a time of general social well-being—and at the same time drug dependence among young people assumed greater proportions. Again the two phenomena were seen by some to be related; this paved the way for the theory that drug dependence was due to well-being and excess. It was only later that underdevelopment, poverty and drugs came to be associated, and sparked off a search for other causes.

Various theories continued to be put forward. Some assertions were so general as to be irrefutable since they were impossible to verify empirically. One was the claim that drug dependence is the result of the collapse of traditional values.

Other theories based on the simultaneous occurrence of spreading drug dependence and certain forms of social change were refuted by the observation that the same social conditions did not always give rise to similar phenomena. One of the most important of these theories claimed that there was a relation between the loosening of family ties and drug dependence. This theory, of course, originated in highly industrialized

Photo Soichi Sunami © Museum of Modern Art, New York

It has been suggested that the spread of drug dependence is due to the loosening of traditional family ties. However, some doubt was cast on this theory when drug dependence was observed among young people in a context of stable family structures. Above,* Family Group *(1945-1949) by the British sculptor Henry Moore.

countries, where the family has been affected by the demands made by the level of organization and by the tensions of industrialized society.

The family and especially the parents were blamed for this tragedy. Today, many people question their culpability, having seen situations in which the epidemic of drug-taking on the part of young people has appeared in a context characterized by social and economic immobility and the stability of family structures.

Lastly, the idea that there is a causal link between unemployment and drugs has recently been disproved by the spread of drug dependence among workers.

Logically enough, whenever one of these theories was put forward, those concerned with the prevention and treatment of drug dependence took action against the supposed causes of the phenomenon. In consequence, for more than twenty years we have seen a feverish succession of prescriptions and measures intended to tackle a wide variety of different "causes". Everyone agrees that education is an essential tool in combating drug dependence, above all as a means of prevention. However, it has lost its bearings and is now at the centre of a heated argument that is fed by alternating aetiological "credos".

The inability of the family and the school to perform their respective educational functions has been castigated by the supporters of these different theories, who maintain that certain factors are the cause—or at least contribute to the cause—that corresponds to their particular theories. The following remarks are intended to help these two great forces which are under accusation—the family and the school—to rediscover their bearings and to perform their difficult task successfully, each in its own sphere of responsibilities and each applying its own methods.

Although family upbringing and school education have much in common as regards their dynamic and their aims, there are important differences between them.

By family upbringing we mean the natural process by which parents and other members of the family nucleus transmit to their children a number of messages, by word, action and behaviour. Such messages give, more or less directly, an indication of what "should be"—in other words, guidance for living and an idea of the behaviour that is expected of young people.

School education, on the other hand, is an institutional process designed to integrate the process of family upbringing. In school education trained professionals transmit messages which are meant to inform their pupils and influence their behaviour by means of the values and ideals that they assimilate.

The process of family upbringing is largely unconscious, and in the mechanism whereby messages are transmitted and received the emotional or affective element is usually more potent than the intellectual or cognitive element. School education, on the other hand, is a conscious process, although the emotional or affective element may play an important part in it.

The two educational processes, for all

their differences, have one thing in common: they interact with a series of influences originating in the circumstances of the young person's life. It is clear that the effect of identical educational processes will vary as a result of different external influences. It is generally realized that the influence of friends, or the "peer group", is extremely powerful in this respect, especially at certain stages of adolescence.

If the influence of the peer group conveys the values of an alien or hostile culture, it will encourage and strengthen attitudes of confrontation and opposition to the authority of parents and teachers, together with rejection of the culture to which the family and the school owe allegiance.

Instead of being a part of the growing-up process, when adolescents assert their own personalities and attempt to throw off the bonds of parental authority, this stage may on the contrary become an opportunity for messages from alien and hostile cultural sources to enter their minds. The young person's personality becomes a battle-field, in which the more powerful influences can be expected to prevail.

How does the peer group transmit the messages of the drug culture while the school and the vast majority of families belong to a different culture? To answer this question, we need to know where the drug culture comes from and what sustains it.

The idea that young people themselves create the drug culture because of weaknesses in family upbringing and school education is thoughtless and superficial. Reliable research findings now indicate that the drug culture is the outcome of shrewd manipulation by the many persons who work for the barons of the drug traffic.

Preventive education against the abuse of legal or illegal drugs is at the heart of Unesco's action against drug dependence. Below, schoolchildren in Singapore examine the diseased lung of a dead smoker.

Photo WHO/Singapore Ministry of Health

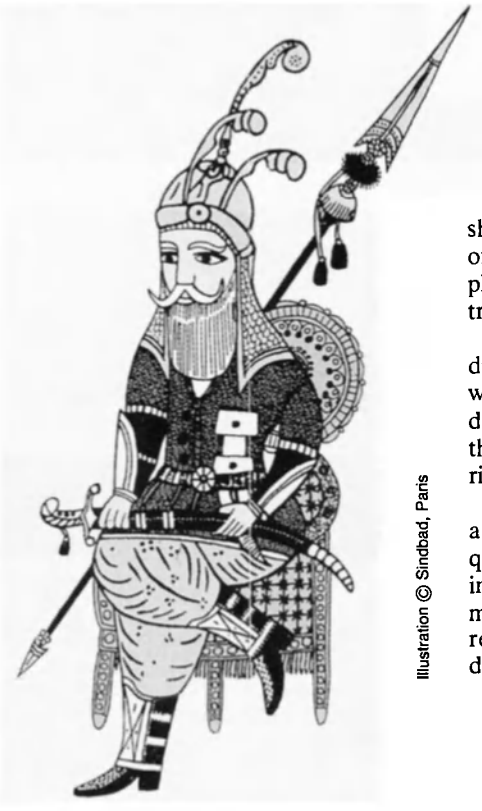

Illustration © Sindbad, Paris

These powerful figures possess very considerable financial resources and highly efficient and far-reaching organizations. Just as the great fashion centres and the producers of other consumer goods create and impose a culture that aspires to the acquisition of such products, so those who control the vast drug market create and impose a culture that leads inevitably to drug abuse and the spread of drug dependence. In this market, young people are not active agents; they are conditioned customers.

If this is true, it is false and unjust to blame the family or the school, and it is pointless to look for causal factors among social phenomena or tensions. Drug dependence springs from the drug culture, which, in its turn, is created by drug traffickers and their battalions of propagandists.

The family and the school should realize this; they should stop feeling guilty and should understand that, in the present state of affairs, if they wish to protect young people they must do more than generate and transmit traditional positive influences.

Drug abuse will not be beaten unless the drug culture is beaten too, and this means waging a determined struggle against illicit drug production and trafficking and against the powerful criminal syndicates that grow rich in this way.

Of course the family and the school have a role to play, but their efforts will be inadequate if not fruitless unless government institutions and the resources of the community are mobilized to defeat those responsible for the scourge of drug dependence. ■

Drug taking is no recent phenomenon, and drug abuse has been resisted throughout history. In an episode from the* Sirat Baybars, *a folk account of the life of Baybars I, a 13th-century Mamluk Sultan of Egypt and Syria, Baybars attacks corruption, crime, prostitution and hashish smoking in the Cairo slums. Above and below, details of cover illustrations from 2 volumes of a new French translation of this vast work of some 36,000 pages.

GIUSEPPE DI GENNARO, *Italian jurist, has been Executive Director of the United Nations Fund for Drug Abuse Control (UNFDAC) since 1982. He was previously Chairman of the UN Commission on Narcotic Drugs and frequently served as a UN consultant. In his own country he has been a judge and occupied various high-level posts in the Italian Ministry of Justice. He is the author of numerous articles and reports on drug problems, criminology and other legal matters.*

The new world of artificial intelligence

THE days may soon be past when a pessimist could say that a computer, for all its capacity for rapid calculation, was a "high-speed idiot" because it could not "reason". We are now moving into the age of "intelligent machines" and of "artificial intelligence"—a discipline that has an important place in informatics.

Artificial intelligence is a branch of informatics which studies the theoretical bases, methodologies and techniques which make it possible to design hardware and software systems capable of performing tasks which to the non-expert would seem to belong exclusively to human intelligence. The aim of artificial intelligence research is to produce systems which behave intelligently and interact with the world outside them just as human beings do.

In practice, the results of research into artificial intelligence are now becoming part of our everyday lives. Artificial intelligence systems are acting as advisers and experts in such fields as lexicological analysis, medical diagnosis and genetic engineering. There are robots which have the power of perception and visual recognition and the ability to behave rationally in unfamiliar circumstances, terminals which converse in natural languages, either in speech or writing (though there are limits to their abilities in this sphere), systems that solve problems and demonstrate theorems.

Every two years, specialists meet to exchange information at the International Joint Conference on Artificial Intelligence (IJCAI), which is usually held in a leading world centre for study in this field. The first conference was held in Washington, D.C., in 1969, and since then conferences have taken place in London, Stanford, Tbilisi, Cambridge, Tokyo, Vancouver, Karlsruhe and Los Angeles. This year the Conference is being held in Milan, in recognition of work done in Italy in this field of advanced research. It will take place from 23 to 28 August, in the Centro Congressi Mirafori.

The philosophy of IJCAI is based on the belief that contemporary thought has succeeded in unifying the concept of culture; the old idea that scientific culture and humanistic culture are two different things has been discarded. The culture of our day should therefore be characterized by the synthesis of these two forms of mental activity.

Artificial intelligence is thus claimed to be the supreme example of an interdisciplinary subject, as was made clear at a symposium to prepare for the IJCAI Conference in Milan, held at the St. Vincent Cultural Centre (Italy) on 21 February last. The work of the symposium, entitled in an allusion to Beckett's play, "Waiting for Robots: the immediate future of artificial intelligence", could perhaps be summarized by saying that two fundamental questions are being asked in this field: how far and how soon will robotics be able to take the place of man; and will man ultimately be rivalled, if not completely outstripped, by machines.

Mr. Basilio Catania, the director of the Turin Telecommunications Research Centre and Laboratories, a leading Italian research institution in the field of artificial intelligence, pointed out that man possesses muscle power, faculties of perception, and intelligence. Over the centuries, man has constantly aimed to extend these capacities. His first success in enhancing his muscle power, the invention of the wheel, was followed by many others and culminated in the harnessing of the atom. He enhanced his faculties of perception by inventing increasingly efficient tools, leading to the development of the electron microscope, the radio telescope, and television.

In the sphere of human intelligence, one of the most significant steps forward was the invention of the pocket calculator, the prototype of the complex modern machines which make it possible to increase man's mental capacity and will do so to a still greater degree in the future. Artificial intelligence sim-

Some key words in artificial intelligence

The expression **artificial intelligence** was formulated for the first time in 1956 by John McCarthy of Stanford University (United States).

This new discipline proposes to overcome the current limits of informatics in certain areas, improving and extending the performance of computers. Its purpose is not to "simulate" human intelligence but to "emulate" it, since there is no basis for excluding the possibility that some manifestations of human intelligence, problem-solving, for example, can also be provided by adopting methodological approaches that are not necessarily anthropomorphic.

Within artificial intelligence, an **Expert System** is a system capable of automatically solving problems of a certain type, proposed by the users of the system. An Expert System is the result of the collaboration of two designers, the "knowledge engineer" who develops the algorithms (the sequences of instructions for solving a particular problem) necessary to construct the solution and the structures suitable for receiving the base information, and the "problem expert" who furnishes the body of facts and deductive rules, called the knowledge base of the Expert System.

Industrial exploitation of Expert Systems will increase with the use of **fifth generation machines** (see article page 16) which are currently the subject of intensive research. The Expert System is directly embedded in the electronic architecture of these machines, which are created with the most advanced technologies of microelectronics, such as Very Large Scale Integration circuits, which present a million transistors on a single silicon chip.

by Domenico de Gregorio

Photo © Philippe Plailly, *Science et Techniques*, Paris

ply enables man to "extend" his own intelligence, as it were, by providing a "prosthesis" to help him perform various functions.

We must, however, beware of thinking of the future of these "prostheses of intelligence" as a collection of anthropomorphic robots: a car may be regarded as a prosthesis of legs, but it is not the same thing.

One of the most advanced fields of artificial intelligence research has led to the construction of what are known as "connection machines", in which a large number of tiny calculators, instead of working sequentially, work on various pieces of information at the same time—which is what happens in the human brain—and combine the results. This was the field selected for the EEC project on "Basic research in adaptive intelligence and neurocomputing".

The great scientific discoveries of the twentieth century, such as the splitting of the atom and, more recently, genetic engineering, have conferred on man enormous powers which can be used for good or ill. Artificial intelligence, too, may be used for good or ill. The availability of vast amounts of information which can be analysed in a fraction of a second can be a source of financial and political power and can thus be open to all kinds of abuse. But artificial intelligence can also bring many advantages. It may help to provide more rewarding occupations for millions of people, increase productivity and take some of the drudgery out of work.

Advances in the field of artificial intelligence will soon produce "fall-out" which may have surprising and awe-inspiring consequences such as giving sight to the blind. A project now under way at Rockville, Maryland, is currently examining the possibility of using about a hundred thousand micro-electrodes, associated with nerve cells in the embryonic phase of the visual cortex, to connect with the visual structures of the brain and give sight—even if only rudimentary sight—thanks to a microscopic telecamera implanted in a pair of spectacles, completely by-passing the eyeballs and the optic nerve.

While the opportunities opened up by artificial intelligence can be expected to create new and more satisfying kinds of work, problems are bound to arise, ranging from the revaluation of certain categories of work and those who do it, to problems connected with privacy and the security of information, which may have important legal implications. ■

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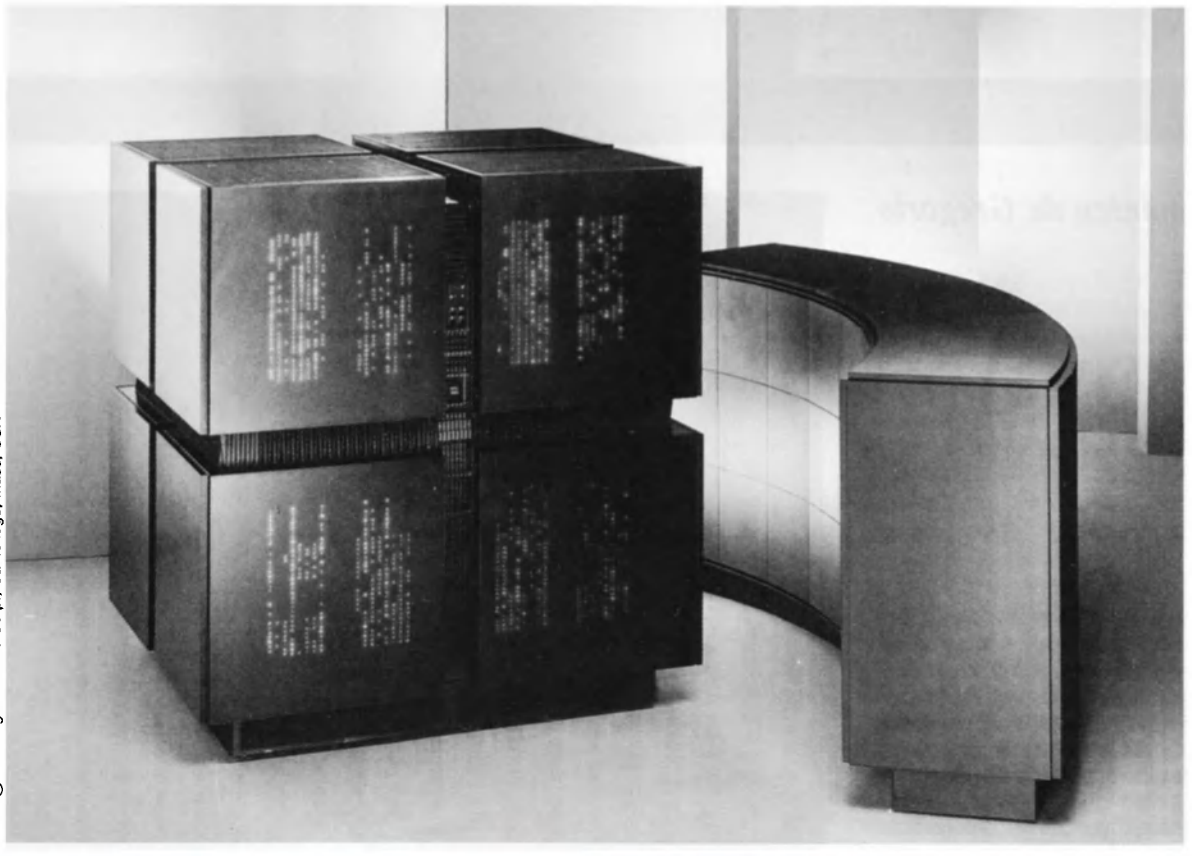

Photo © Thinking Machines Corp., Cambridge, Mass, USA

by Norihisa Doi,
Koichi Furukawa
and Kazuhiro Fuchi

The search for a thinking computer

As part of an unparalleled long-term research and development effort, computer scientists in a number of countries are today trying to bridge the gap between the limited computer intelligence that exists now and something approaching human capacities. One of many obstacles in this search for a machine as intelligent as man lies in the limitations of conventional computers which perform their operations one step at a time. The search for a solution to this problem has led to the development of "parallel processing" systems which operate on thousands of data elements at once. In the computer shown above tens of thousands of processors co-operate on the processing of a single task.

WITH few exceptions, all present computers are *von Neumann* computers, so called after John von Neumann, one of the scientists whose work was seminal in creating and developing these machines. The von Neumann computer is characterized by data and programs that are stored together (stored program) and programs that are executed sequentially (sequential control). In the von Neumann computer, everything to be done must be defined in advance in the form of procedure. The *program* describes procedures in a language the computer can understand. In the program, the procedure is called an *algorithm*. This system presents no problems for numerical computation and routine clerical processing, since procedures can be pre-defined for this kind of work.

However, most activity requiring human intelligence is characterized by the need to accommodate strategies flexibly to the demands and complexity of a particular situation. Using the example of language, which is the basis of intelligent activity, the meaning of a word may vary with the situation in which it is used. The meaning of a word also changes in relation to surrounding words. The meaning of a sentence also depends on the object of the sentence and circumstances of use.

Consequently, when one tries to write a program to analyse the meaning of a word in a sentence, all cases in which the word can be used must be considered. However, the number of cases will be colossal, and even if all cases could ever be listed the program would never be completed in a reasonable time. In other words, such a program would have very

little practical value because of the excessive processing time.

It is clear that computers must perform intelligently and flexibly in the applications required by the society of the 1990s. The problem is how to develop a computer with this capability. A first approximation to solving this problem can be found in artificial intelligence research. But because of the limitations described, the results of artificial intelligence research cannot be put into practical use with existing computers.

Stated simply, the goal of artificial intelligence research is that computers should perform in an identical or similar manner to human intelligence.

This research takes two approaches: one models the mechanism of human intelligence; the other attempts to achieve human intelligence in the computer by processes that are not necessarily the same as actual human intelligence, the emphasis being on the result.

Major themes of current research in artificial intelligence are:

1) Proof of theorems. Conclusions are made based upon axioms and inference rules. The computer can be an aid in proving theorems, but this field has not developed to the point where computers can automatically prove theorems that human beings cannot.

2) Games. Studies aim at methods of choosing the best move in all game situations and strategies for winning the game. This field has developed a number of methods of finding the best of all possible moves and thus has helped to solve problems.

3) Robots. Research and development in this area is mainly aimed at controlling manipulators to perform skilful work, developing sensors, and developing high-level languages to describe work environments and commands.

4) Vision understanding. The aim here is to make it possible for computers to recognize faces, scenes, photographs, etc. A variety of image analysis methods have been developed. As a result, computers can now recognize complicated scenes on condition that knowledge on the subject be input previously. However, a general method of coping with a wide range of objects has not yet been developed.

5) Natural-language understanding and voice recognition. How to make computers understand sentences and speech in natural language, e.g., in Japanese, English or French, is the focus of this field of study. There are already some experimental systems that can understand English or Japanese when objects are limited. However, as the number of objects increases, the number of words and sentences required increases even more, necessitating common sense and inference rules. Thus, much further study is required.

6) Knowledge engineering. Research in this area aims at storing experts' knowledge and automatically finding the answer to a given problem. The system used for this purpose is called an *expert system* (see box page 14). Efforts have been made to apply this to medical treatment, machine design/maintenance/repair, and education.

What are known as "fifth generation" systems are being designed to overcome the shortcomings of the present-day computer.[1] In particular, research is concentrated on knowledge information processing.

Computers of the past and present generations have simple hardware architecture and implement complex functions through software. In 1982, the Japanese Ministry for International Trade and Industry initiated a project to develop computers capable of forming the basis of an advanced information society in the 1990s. In this project, it was decided to use technologies that are essentially different from those of the past.

In other words, the ultimate form of fifth generation computer should be oriented to knowledge information processing and achieved on the basis of revolutionary theories and technologies. The fifth generation computer is a knowledge information processing system that, overcoming the technical limitations of conventional computers, implements the intelligent conversation and knowledge base inference functions required in the 1990s. Its applications are expected to be more extensive than those of conventional computers.

The four basic functions the fifth generation computer must achieve are:

1) Problem solving and inference functions. Logical deductive inference and inductive inference to solve a given problem, including guesses based on incomplete knowledge.

2) Knowledge base management functions. Acquisition, storage, and utilization of various kinds of knowledge required in the inference process.

3) Intelligent interface functions. External interfaces that use natural language (sen-

1. Computer "generations" have been defined by the components used:

Generation	Approximate period	Component
1	1946-1958	Vacuum tube
2	1959-1964	Transistor
3	1965-1977	Integrated Circuit (IC)
3.5	1978-1983	Large Scale Integration (LSI)
4	1984	Very Large Scale Integration (VLSI)

Tomato talk

In the widening field of artificial intelligence, computers are being asked to solve an array of real-life problems ranging from the diagnosis of illness and the prescription of treatment, to exploration for minerals. "Expert systems" are programs which help the computer to mimic the behaviour of human experts when tackling these problems. The questions and answers below are part of a computer dialogue between a tomato-grower and "TOM", an expert system in plant pathology developed by Alain Bonnet, a French specialist in artificial intelligence, and Dominique Blancard, a researcher in plant pathology.

TOM: Age of plant?
User: Adult.
TOM: What variety?
User: Vemone. ...
TOM: Have you noticed yellowing, withering or drying of the leaves (not to be confused with spots on the leaves)? Generally, this yellowing affects the lower parts of the plant, and only affects a few plants at first.
User: No. ...
TOM: Have light brown or greyish spongy galls been observed on the roots, concentrated at soil level?
User: Yes.
TOM: Are these symptoms by any chance more noticeable in the wettest parts of the plot?
User: No.

TOM then gave "his" diagnosis of possible diseases.

Photo Michel Guillard © Scope, Paris

Hands that "see"

Advanced computer technology has made it possible to endow robots with "sight", a sense of touch, and in some cases the ability to respond to voice commands and make basic decisions about the situations they encounter. Photo above shows "Magali", an apple-picking robot developed in France. Artificial vision is an essential component in Magali, whose arm is guided to the fruit by a television camera associated with a microcomputer. In robot vision systems a computer analyses an image, converted into digital form, fed into it from a television camera and directs the robot to perform a specific task when it "detects" certain features that have been programmed into its memory. Below, a computer-controlled hand developed at the Massachusetts Institute of Technology (MIT). The hand is capable of picking up an egg without breaking it. Each finger can make 40 movements a second. Covered with a plastic skin equipped with sensors, the hand can "recognize" different materials such as metal, plastic and wood, and instantaneously measure the temperature of objects that it touches.

Photo © G. Morice, Paris

tence, voice), graphics, and images, and can converse naturally.

4) Intelligent programming functions. Functions to automatically convert a given problem to efficient computer programs.

To achieve these functions, various technologies of hardware architecture, software engineering, and artificial intelligence are being studied and developed.

The first task for achieving knowledge information processing and fifth generation computers is the selection of the programming language best suited to describe intelligent activity by the computer. To select the language, it is necessary to understand the fundamental mechanism of the intelligent activity to be described. It should be noted that the present computer is a machine developed to model the fundamental mechanism of numerical computation: that is, the four rules of arithmetic.

In fifth generation computer systems, *logic,* in particular *predicate logic,* was selected as the principle of intelligent activity. Logic is generally regarded as the universal rule of thought. Of numerous types of logic, predicate logic is most closely related to our daily language. This means that anyone can handle predicate logic, although it may seem difficult at first because of its rigour.

Of course, predicate logic alone cannot account for all intelligent activities; it is certainly, however, the most powerful logic for description.

The basic mechanism of logic is *inference.* Inference is a rigorous procedure for acquiring unknown information using known information and knowledge. Inference plays a central role in our understanding of meaning, whether or not we are conscious of its use. The basis of intelligent activity is to possess knowledge and make inferences.

Inference is made according to inference rules. The most fundamental inference rule is the *syllogism.* A syllogism is a form of reasoning as follows: A is B; B is C; therefore, A is C. One method of having the computer make inferences automatically is to incorporate this inference rule in the hardware, and this is the approach of the project on fifth generation computer systems.

The method of describing a program logically and executing it by inference is called *logic programming.* Predicate logic programs allow *parallel processing,* which resembles the process of obtaining unknown quantities in a system of simultaneous linear equations concurrently. One objective of the fifth generation computer systems project is to achieve parallel processing directly by hardware. In other words, the project aims at developing computers that can perform symbol-crunching computation at high speed. For this reason, the final form of the fifth generation computer will be a *parallel inference machine* consisting of a number of element processors.

The research and development of fifth generation computer systems involves many unknown factors and great risks. For this reason, the research and development period spans ten years and is divided into three stages—three years for the initial stage, four years for the intermediate, and three years for the final stage.

Fifth generation computer systems could be applied to any area that requires problem solving and inference functions.

To take the example of medical treatment, countless applications can be listed: automatic nursing systems monitoring serious cases through the night and giving treatment support when the patient's condition changes suddenly; systems to help analyse X-ray films or tomograms and diagnose the area for treatment; systems to help determine the name of the illness or prescribe medicine based on various check data; systems to devise duty schedules for nurses and systems to decide menus. When studies in natural-language understanding advance further and machine translation at higher levels becomes possible, or when people place international calls to speakers of another language, both parties may be able to speak in their own tongue. In education, more effective educational systems can be expected, in which one will be able to judge the optimum way of giving instructions to each individual. Present computer aided instruction (CAI) systems cannot do this.

Needless to say, these applications will occur not only through the achievements of research on fifth generation computer systems but also through research in artificial intelligence that makes clear the models and mechanisms of intelligent functions. Thus, continued research is very important.

The goal of the fifth generation computer systems project is to create a knowledge information processing system that can help people solve problems in their exploration of the unknown, and significantly extend the scope of their intellectual activity. This will have an immeasurable impact on industry and society. ■

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Photo G. Morice © Secoia Press, Paris

Using a computer and an expert system, this researcher can compose music "after the manner of" the great composers. Only African music presents problems.

The city-builders of Islam

by Mohammed Allal Sinaceur

'FOR a Muslim ... the term 'Mother Nature' defies translation. The Muslim is no ecologist. ... Islam took root in regions where nature is, generally speaking, hostile to man. ... Its ideal is the artificial world—the city, the irrigation system, the garden, which is introduced into the home and represented in the design of a carpet. The poetry of Islâmic urban culture speaks not of virgin landscapes but of the flowers of the garden. ..."[1]

These words of the Islamist Josef van Ess are a reminder of the value that the city holds—as we would expect of a great civilization—for Islam, and above all for Arabs. In the Islamic context, the connotations of terms such as "city", "urbanity", "urbanism", even "civility", are so similar as to make these words virtually interchangeable. The city is the art of living together. Islam, then, it might *a priori* be concluded, is a founding, constructing and urbanizing, rather than a conquering civilization. Whereas relations between other cities, as, for example, in ancient Greece, were marked by rivalry, among Islamic cities there existed a sense of membership of an urban society with a shared culture and way of life.

To understand this phenomenon we need to examine the genesis of the Islamic city, provided that we can find an example that is sufficiently ancient and representative. What better prototype could there be than Al-Kūfah (Iraq), the first city of Islam, whose birth was recently related in a book by the Tunisian historian Hichem Djaït?[2]

But first, a little historical background. Kūfah was founded in AH 17/AD 638, during the early years of the rise of Islam, five years after the collapse of the kingdom of the Lakhmids during the reign of Khosrow II. Symbol and centre of the new Arab sway, Kūfah was constructed near al-Hīra, the Lakhmid capital which for three centuries had dominated the region and whose power and functions Kūfah was eventually to take over. The Islamic empire was founded, and a decisive step forward in human progress, the abandonment of nomadism in favour of sedentary life, was initiated.

Kūfah drew its strength from the relative financial autonomy of the new province. In selecting its site, Caliph 'Umar I is said to have decreed that no *bahr* (river) should separate it from Medina. The first Islamic city outside Arabia had to be in direct spatial contact with the homeland. This prerequisite was later applied to other towns. Only conditions that suited their camels, said Caliph 'Umar, were right for Arabs—zones open to the steppe and in uninterrupted contact with pastoral life.

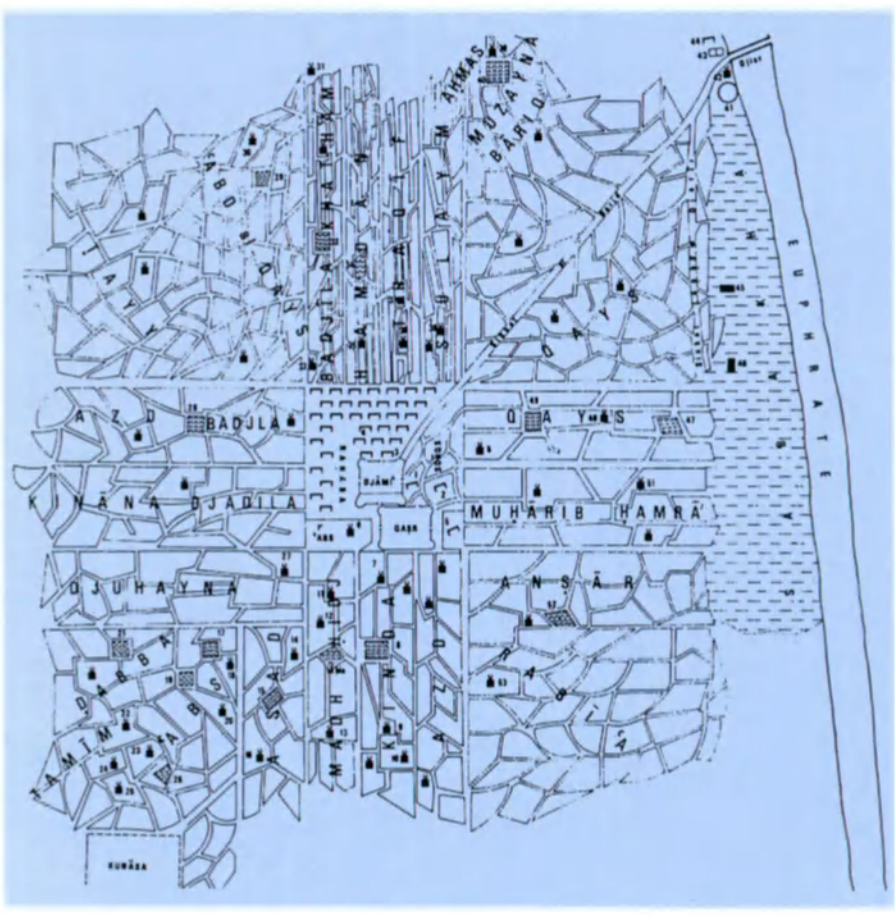
Such, indeed, was the position of Kūfah, remote yet in contact, on the border of steppe and cultivated land, and thus a focal point of interchange and complementarity. The first city of Islam, Kūfah symbolized its spirit: a civilization of borders and links, of transition and mediation; for, in terms of human geography, the role of Islam has been to provide the "bridges", the "railheads", the "termini" which link the towns of the desert to the huge cities of the North.

Some historians relate that, at the founding of the city, a site was marked out by shooting arrows from a central point at which were located the *masdjid* (mosque) and the palace. Town-planning was born

Photo © Istanbul University Library, Turkey

1. *Le christianisme et les religions du monde* ("Christianity and the Religions of the World") by Hans Küng and Josef van Ess, Editions du Seuil, Paris, 1986.
2. *Al-Kūfa, naissance de la ville islamique* ("Al-Kūfah, Birth of the Islamic City") by Hichem Djaït, Editions Maisonneuve and Larose, Paris, 1986.

Right, the city of Aleppo (Arabic Halab) in Syria as depicted in a miniature from Nāsūh al-Matrakī's Itinerary, a AH X/16th century AD manuscript describing the campaigns of Sultan Sulaymān the Magnificent. Aleppo was a Hittite, Assyrian and Hellenistic site before becoming one of the great cities of Islam. The citadel, surrounded by a moat, is built on a huge mound in the centre of the city.



Left, map of Kūfah at its apogee (AH 100-120/AD 718-738) during the Umayyad period

: tribal plot (qatī' a)

: street (sikka)

: residence of an aristocrat (dār)

From *Al-Kūfa, naissance de la ville islamique* by Hichem Djaït, Editions Maisonneuve & Larose, Paris, 1986

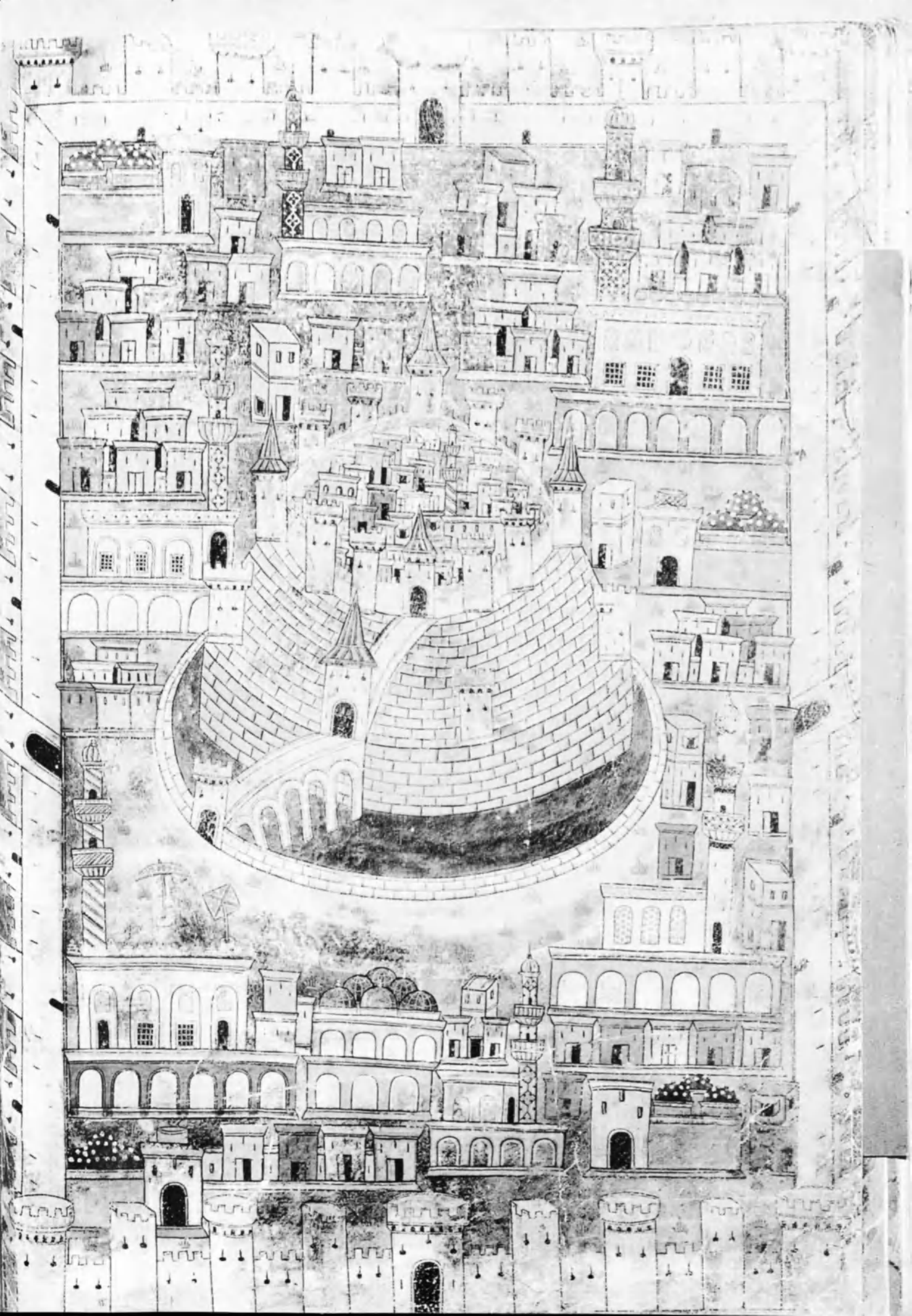


Photo Pierre Schneider-Unesco

when the construction of permanent, mud-brick buildings began. Considering that the mosque was the first building to be marked out and built at Kūfah, that 'Umar I decreed that houses should be limited to three rooms and should not be too high, that roads should be clearly defined and that land should be allotted to the tribes in conformity with the regulations, it is clear that town-planning *(takhtīt)* and civilization *(tamsīr)* went hand in hand, at the same pace and on the same wave of progress, with the aim of establishing a defined and ordered space to which the Umayyads were later to add the seal of truly monumental constructions tuned to the harmonies of other disciplines.

What was the source of this organizational plan, of the juxtaposition of mosque and palace? What were the origins of the *sūq* (market-place) which surrounded this monumental complex and was built in such a way as to respect both the plan and the exigencies of the terrain? What precedent was there for the immense public area which, in 'Umar's day, could hold 4,000 horses? Every trace, every scrap of information must be examined if the impetus that gave rise to the founding of this and other Islamic cities is to be understood. We must scrutinize everything that scholarly erudition and comparative research can reveal about that matrix of urban construction which is Kūfah.

Kūfah marked the advent of Islam the mediator, the inheritor, the innovator. The city itself was heir to a rich legacy, drawing much from Babylon, the Mesopotamian, oriental model, and from the cultural heritage preserved in the twin city of Seleucia on the Tigris/Ctesiphon, the Parthian capital. As in these cities, the central palace-mosque complex was a distinctive feature, a veritable urban unit; however, in Kūfah this central unit never became an isolated citadel as in Babylon, or later, in Baghdad (Iraq), the circular city of the 'Abbāsids. If in later cities the palace was moved to the outskirts, the mosque and the market remained where they were, surviving all transformations, specific and unvarying in location and status, the symbol of centrality, the heart of the city.

Another heritage, another choice! Could the Greek or Hellenistic city have influenced Kūfah? The Greeks and the Romans built their standard pattern cities in their colonies, just as the Arabs built theirs on the borders of Arabia. It is difficult to detect any evidence of influence from this quarter. Greeks, Romans and Arabs each assimilated and enriched foreign traditions, as does any "torch-bearing" civilization.

The first Kūfah was destroyed by fire, perhaps because its builders had not sufficiently respected local environmental conditions. Those who rebuilt the city learned from their first urban venture in the conditions of a new land, drawing inspiration from their patrimony of ideas, but building on the basis of their experience of their surroundings. Legatees like the Persians,

Houses in the old city of San'ā', capital of the Yemen Arab Republic. Since 1986 the old city of San'ā' has been included on Unesco's World Heritage List.

synthesizers like the Romans, the Arabs were also innovators both in that, for them, the act of founding a city was the outcome of a reasoned project, and that in erecting a structure they drew on the traditions of the Arab city and on their own Arabian culture.

The Arabs had, indeed, experienced city life long before they founded cities. In founding Kūfah they had behind them a wealth of experience gained, it would seem, in the north of the Arabian Peninsula. Long before the coming of Islam, perhaps before the development of written Arabic, cuneiform inscriptions bear witness to the existence of a whole Arab culture. This ancient identity reached its zenith during the first three centuries of Islam under the enlightened impulsion of a universal faith which led to the creation of cities, of a State, of an Empire. Thus Arabism, in a non-tribal sense, became co-extensive with Islam, vehicle of universality.

The identification of Arabs with nomadism, so marked in the writings of the great Arab historian Ibn Khaldūn, is a comparatively late phenomenon. Were the Arabs formerly a sedentary people who became nomads by accident? The answer is a definite yes. For the Arabs, then, the city is perhaps an environment regained which became more and more clearly defined as the Islamic era approached. With the advent of Islam the Arabs found their historic destiny as builders and citizens. "On the whole," wrote the French Islamist William Marçais, "the spread of Islam ... found its expression ... in an extension of urban life."[3] However, the Arabs' cultural background and bedouin roots, strengthened by proximity to the desert-refuge, gave them a spirit of resistance, a marginal quality which left them open to the appeal of nomadism, of a way of life more in tune with nature than with culture. They

3. "L'islamisme et la vie urbaine", in *Articles et conférences* by William Marçais, Editions Adrien-Maisonneuve, Paris, 1961.

Photo Richard Kalvar © Magnum, Paris

In the sūq, the old market, of Marrakesh, Morocco.

remained the greatest romantics of history with a throbbing, irrepressible nostalgia for, and innate identification with, the spirit of nomadism.

Thus it was through Islam, revealed as it was in an urban setting, that the Arabs were able to fulfil their destiny as citizens. This they accomplished all the more easily, definitively, thanks to the examples of at-Tā'if (in what is now Saudi Arabia), Yathrib (pre-Islamic Medina) and Mecca. These men, who had become nomads, knew that the city too could defend itself, have its share of culture, and be the symbol of unity. The city, arising from some inner well-spring of Arabism, was the fruit of the territorializing activities (paradoxical in these nomads-by-accident who had become nomads by temperament) of the tribes for whom the city at times became the site and primary source of innovation and the focus of the urge to come together and to unite.

Kūfah, then, drew on skills from many sources, including those of the Yemen which had already been tested out in the Hejaz region in the heart of the Arabian Peninsula, as witness the *jabbānāt* (tribal burial grounds) and the *dūr* (houses) of the nobles. Mecca provided a model of the notion of the centre and of its pre-eminence. Even the marking out of the centre of Kūfah by means of arrows was a memento of the ritual involving arrows practised in Mecca. More than this, the notion of founding the city, of urban planning, drew its inspiration and took as its model the actions of Ibn Kilab Qussayy (a 5th-century prince of Mecca), ancestor, builder, town-planner and architect. At-Tā'if, too, provided another urban model with its fortifications and city walls. Finally, Medina offered the first example of a twin central complex with its juxtaposition of the house of power and the house of God, although, in the time of the Prophet, authority was exercised from the mosque itself.

It was only when the lessons of all these models had been fully assimilated that the new Islamic city arose on the fringes of the desert. More than a *polis* (city), it was a *politeia* (a whole social and political order). It was a focal point at which life gathered and then radiated outwards, flowing along its streets and avenues. It encompassed the areas earmarked for each tribe where they could build their dwellings. Above all, it was organized to meet economic needs, with sites allocated to economic activity, the *sūqs* which were a direct reminder of Medina where the Messenger of God had himself organized them, separating commerce from prayer, market from mosque, thus putting an end to the traditional, age-old, oriental muddle. It was by this action that the *sūq*, until then a sort of fair, became a distinctive feature of urban life.

All this is a far cry from the sententious pronouncements of Orientalists anxious to demonstrate, by their assessments of the Islamic city, that the city in the full sense of the term is really an exclusively European phenomenon. How can Kūfah, with its planned space, its urban sub-units, its political and religious centre, its well laid out avenues and streets, be considered a haphazard construction? One should talk rather in terms of an overall master-plan. The rationale is so profound, especially in the harmony achieved between human and institutional needs, that the original outline long remained, despite the later separation of vocational and functional institutions, so evident in the palace-city: "A universe of courtyards, houses, public baths and strange doorways, decorated in an extraordinarily rich style [such as] appeared in the tale of 'The City of Copper' from *The Thousand and One Nights.*"[4] ■

4. *La formation de l'art islamique* ("The Making of Islamic Art") by Oleg Grabar. Editions Flammarion, Paris, 1987.

MOHAMMED ALLAL SINACEUR, *director of Unesco's Philosophy Division and professor of the sociology of development at Hassan II University, Casablanca (Morocco), was formerly a research officer at the French Centre National de la Recherche Scientifique. He has written widely on philosophical problems and on the history of mathematics.*

Photo © Institut français d'archéologie du Proche-Orient, Beirut

Aerial view of the medieval city of Bozrah (Syria) shows its maze of narrow streets, massive citadel and the east-west road which was once the main thoroughfare.

Fighting words

The myth of the 'hereditary enemy'

by Jean Blot

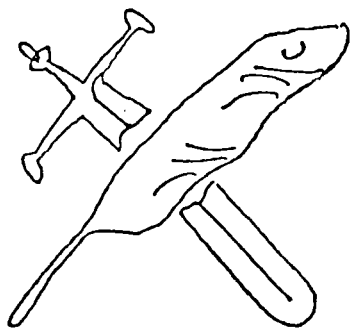


Photo © International P.E.N, London

The logo of International P.E.N.* (Poets and Playwrights, Essayists and Editors, and Novelists), *a world association of writers founded in London in 1921, which today has over 10,000 members from all continents and around 90 centres worldwide.

IN his essay "The Writer's Profession",[1] Elias Canetti (Nobel Prize for Literature, 1981) quotes an anonymous author who wrote, a week before the outbreak of the Second World War: "... everything is over. If I were really a writer, I would have to be able to prevent the war!"

Canetti's immediate response is not unlike my own reaction and that of many others to the Slovene P.E.N. Centre's proposal to create a "writers for peace" committee: "an example of the blustering that has discredited the word *writer* and filled us with mistrust as soon as a member of the guild beats his breast and comes out with his colossal intentions."

But Canetti then has second thoughts and causes me to follow suit. In the sadness of the poet's statement, in its admission of failure, there is the affirmation of a responsibility the sincerity of which cannot be doubted. Canetti admits that a situation in which war becomes inevitable can be created through "words, deliberate and used over and over again, misused words", and then goes on to ask: "If words can do so much—why cannot words hinder it [war]?" And he adds—and here too I think he is speaking directly to us writers—"It is not at all surprising that a man who deals with words more than other people do will also expect more of words and their effect."

Of course wars have always originated in conflicts of interest. However, even this statement of the obvious should be analysed, since the term *interest* is as fathomless as life itself. Was it really in the best interests of the Greeks to send their heroes en masse to sack Troy and retrieve Helen, even if the beauty of the princess should be seen as an image for strategic positions and trade monopolies? Can there be any doubt that he who argues most eloquently and persuasively will always win his case?

More recent events demonstrate that "interests" are not necessarily related to obvious factors. I have never been able to get anyone to explain where the interests of William II's Germany lay in the First World War, of which it was to a large extent the cause and architect, although I have been assured that competition between German and Serbian pork had something to do with it.

Who would ever agree to lay down his life for a pig or to sell more pork? Substitute gold, oil, roads or rivers for this perhaps unjustly despised animal, and the question remains just as scandalous. To mask interests, to present them in such a way that they appear vital and that people will agree to risk their lives to defend them, a vast operation of verbal camouflage is needed to transform reality into emotion, passion, enthusiasm. Such a task calls for the gifts of the poet and writer.

Wars have always been preceded by vast battalions of words. As writers, we have a nebulous influence over the vested interests that lie at the root of conflicts, but over the battalions of words which precede, mask and transfigure these interests, our control is direct, our responsibility is great. It is all the greater since in the past our talents have often been used in the interests of belligerence. War precedes peace in the sense that the fear that underlies it and of which it is the projection and the theatre precedes courage. In the infancy of the species and of the individual, the stranger immediately inspires dread. The poet and writer is a child of depths and origins. He is most at home on very ancient ground. Myth suits us better than enlightenment.

If vested interests must wear a mask in order to arm and deceive those who serve them, their first ally will be the atavistic fear of the other, of the stranger. Those who serve such interests will mobilize this archaic fear and direct it along lines which suit them. Since experience alone shows that the world is habitable, the unknown is felt as a threat.

We thought men were white. But here's someone who is yellow or black. We thought men were small and thin. But here's someone who's tall and fat. We thought men had turned-up noses. Here's someone with an aquiline nose. This hooked nose, this belly, this stature, this swarthy skin are bound to mean trouble for me, since, in my inexperience, they

Photo © All Rights Reserved

***"War, my children, serves to defend our interests," reads the caption to this cartoon published during the First World War in a 1915 issue of the Italian newspaper* Avanti.**

1. "The Writer's Profession", in *The Conscience of Words* by Elias Canetti, translated from German by Joachim Neugroschel, André Deutsch, London, 1986.

frighten me! From my fear I project the evil they have in store for me.

And what's more, these nightmarish creatures, whom later, slightly reassured, I shall regard as caricatures of humanity, speak no human language. Can these grunts really be a language? And if they *do* attempt to speak in human language, by which I mean the language that *I* speak and understand, they violate, deform and destroy it. In the violence they inflict on my language I see the hatred which motivates them and which they will soon be venting on me. Thus in Balzac there are whole pages of mimicry of Jewish or German accents; they are not crimes but perhaps they should be considered as offences of war and racism. The person is hated through his accent, and through him the human group to which he belongs.

Body, language, accent. Every custom or habit is impregnated with values consciously or unconsciously held. These values express and sustain the identity of the group and the individual who belongs to it. Who am I but a man who does not eat pork? If another man eats pork in my presence, is he trying to show me his identity or to attack mine? It boils down to the same thing. For the wine drinker, the beer drinker is suspect. Eating habits are rooted in the depths of the psyche.

The English reputation for coldness owes much to the fact that English people only shake hands on exceptional occasions; the French reputation for sensual or sexual excess to the fact that the French kiss in the street. All these factors and many more will be taken up by vested interests when they need to mobilize one group against another, to describe an enemy who is both frightful and despicable since everything about him —what he drinks, eats, his clothing, his behaviour—proves that he does not belong to humanity.

So far I have only spoken of inexperience. We should not forget the manipulation of experience. For centuries, in a relatively stabilized world, peoples have lived side by side, but profoundly isolated by mutual incomprehension of their respective languages, customs and values. Each conflict, in spite of the disappointment bred by its outcome, almost as great among the victors as among the vanquished, in spite of the immediately evident absurdity of its result, prepares and heralds the next.

Experience confirms my obscure intuition that the stranger is dangerous. I thought I had unmasked an assassin. And that's exactly what he is. My share in the crime is all the more quickly forgotten, if it is not concealed, since the people around me, starting with writers and poets, are talking only of heroism. They will translate vague intuitions into words, images and verses, and populate the unconscious with the features of the hereditary enemy. If I have doubts, I shall find certainty in their work.

If we writers have done much to create the hereditary enemy and exclude him from humanity, to prove that he kills and to justify killing him, we can do as much to destroy the myth. It is up to us, and we alone possess this power, to make the stranger a familiar figure, to eradicate the fear which he naturally provokes.

The process of identification dear to the novelist is of great importance here. It is for us to reveal the hereditary or potential enemy from the inside, as if we were what he is. Is it really possible, on reading Tolstoy, to believe for a second that a Russian only removes the dagger from between his teeth when he wants to knock back a glass of vodka? That a Ger-

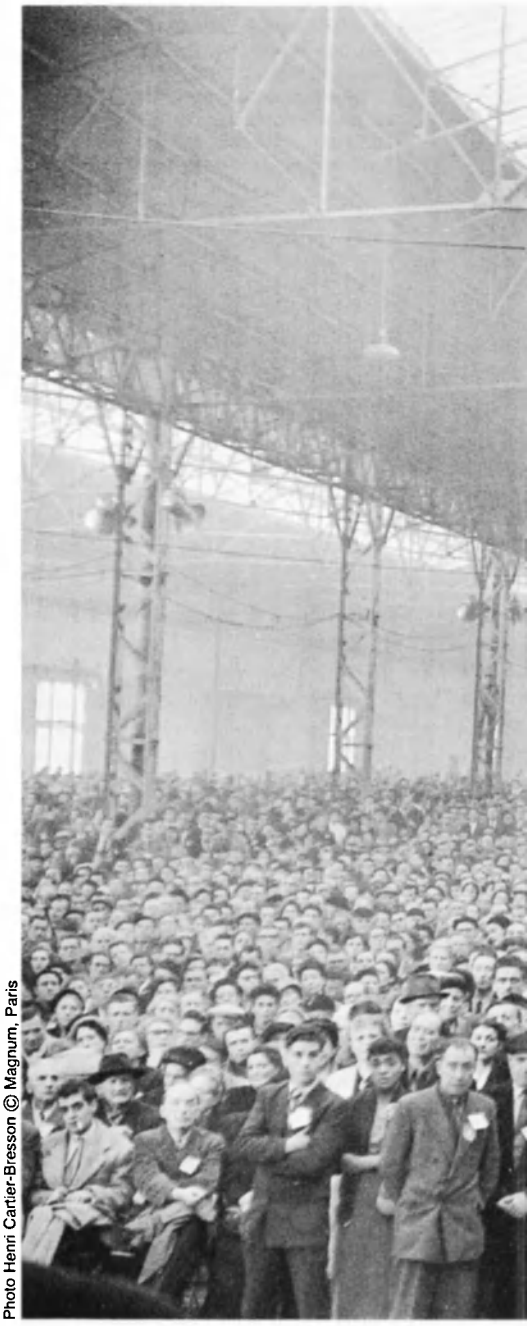


Photo Henri Cartier-Bresson © Magnum, Paris

Photo © Prado Museum, Madrid

"Can there be any doubt that he who argues most eloquently and persuasively will always win his case?" Above, public meeting in Paris, 1954.

"If we writers have done much to create the hereditary enemy ... we can do as much to destroy the myth." Left, Fight with Sticks, *a work (c.1820) by the Spanish artist Francisco Goya (1746-1828).*

man is nothing but beer, sausage and bayonets when we read *Werther* or *Elective Affinities?* The literatures of countries other than our own can play an immense role; it is our duty to make them better known. The conflicts which divide us doubtless remain. But they have become human conflicts to which human solutions must be found.

The role played by our own literatures is even more important. Norman Mailer's novel *The Naked and the Dead* enabled me to imagine for the first time what it was like to be a young Japanese during the war in the Pacific. *The Lover,* by the Israeli writer Abraham B. Yehoshua, gave me an idea of the feelings a young Arab could have about the Israeli bourgeoisie.

But so far I have only discussed the simplest issue, the type of conflict which we rightly think of as belonging to the past. Modern wars, whether local or the total war which we dare not even imagine, have or will have different foundations: racial wars, class wars, ideological wars. Today it is easy to reconcile the French and the Germans, the British and the Americans. We only talk so openly because the divisions between them are a thing of the past. But who will dare explain the Capitalist to the Bolshevik, the proletarian to the bourgeois, and vice versa? Who will dare proclaim, in the conflict that divides them, their opposing and equal humanity? The one excludes the other from humanity. It is behind this verbal mirage that the reality of war announces itself. An impossible task, perhaps. But if we refuse to shoulder it, we can no longer talk of writers for peace.

Let us begin with the basic issues. Pacifists and non-pacifists both wish for peace. It is only the ways and means of maintaining peace that divide them. Some consider that peace can only be assured by a balance of weaponry. Others are in favour of a calculated risk and believe that partial disarmament in a situation of overarmament may bring about

Photo © IAA-Unesco

Unesco poster depicting a detail from* The Pigeons of Saint Mark, *oil on canvas (1949) by the Portuguese-born painter Maria Elena Vieira da Silva.

a general movement of which peace, and all peoples, will be the beneficiaries. The choice of means divides them, but the goal is the same. This must be proclaimed time and time again.

It would be a mistake to forget that the unanimous clamour for peace is a recent phenomenon. Elias Canetti has pointed out that humanity must fear the experiences that it has not yet had, the setbacks it has not yet faced. He suggests that it is easier today to exterminate an entire population than it is to burn a single person on a fire in a public place. This is why the apocalyptic experience of Hiroshima and Nagasaki should not be forgotten.

There is another instinct, the instinct of the survival of the species. It has awakened, it reveals itself in a way which is often confused and odious. We must listen to it, express its mystery, capture this spring of hope where it rises in the depths of night, and use it to irrigate our works and our inspiration. Other inclinations which come naturally to writers are favourable to our project. War is only possible in the abstract. It is for writers to depict the horrors of war as concretely as possible and to see that they are not concealed. Another natural inclination comes to our aid. Men and women of sensibility, we take more pleasure than most in diversity. This delight in the diversity and wealth of the human species should be captured and communicated in a spate of joy which will soon wash fear away. ■

JEAN BLOT *is the pen name of the French writer Alexandre Blokh, who is Secretary of International P.E.N, a world association of writers. Critic, essayist, translator and specialist in Russian literature, he is the author of a number of novels including* Les cosmopolites *(1976, "The Cosmopolitans") and* Gris du ciel *(1981, "Sky-Grey"). In 1986 he published the first biography of the Swiss writer Albert Cohen, and* Ivan Gontcharov ou le réalisme impossible *("Ivan Goncharov or Impossible Realism"). The above article is an edited and abridged version of an address that he gave last year in Bled, Slovenia (Yugoslavia), during a meeting of International P.E.N's Writers for Peace Committee, on the theme of "The Hereditary Enemy".*

Emblem of the United Nations Decade of Disabled Persons (1983-1992)

Society and the disabled

IN the last twenty years and especially since 1981, the International Year of Disabled Persons, the integration of disabled young people into the ordinary education system has become widely accepted and is now a prominent goal of educational planning in many countries.

This undeniable change in attitudes and behaviour towards disabled people is playing an essential role in their integration into working life and into the societies to which they belong. This integration is based on the fundamental principles of equality of access to education and the full participation of all persons, including the disabled, in social life and in national development. It is one of the objectives of the World Programme of Action concerning Disabled Persons which was adopted by the General Assembly of the United Nations in 1982. Unesco is co-operating with other specialized agencies of the United Nations system in implementing the Programme, which was included in Unesco's Second Medium-Term Plan (1984-1989). The integration of disabled young people into ordinary schooling is already being carried out in many Unesco Member States on a long-term basis, to the benefit of both the disabled themselves and of the education systems in these countries, which thereby become more flexible. Integration contributes to the acceptance of "differences", promotes mutual tolerance and respect and encourages the democratization of education.

The concept of "handicap" has been greatly modified in the last two decades. It is now distinguished from that of "impairment" or "disability" and is defined as a disadvantage for a given individual, resulting from an impairment or a disability, that limits or prevents the fulfilment of a role that is normal, depending on age, sex, social and cultural factors, for that individual. Handicap is therefore a function of the relationship between disabled persons and their environment. It occurs when they encounter cultural, physical or social barriers which prevent their access to the various systems of society that are available to others. Thus, handicap is the loss or limitation of opportunities to take part in the life of the community on an equal level with others.

This new concept of what it means to be handicapped highlights the relative nature of differences between the performances or status of disabled people and those of others, and draws attention to the fact that these gaps may be reduced, if not removed, by appropriate action on the disabled person's physical, psychological, educational and social environment, and by measures to make him or her as self-reliant as possible.

From an educational point of view, the integration of disabled people requires specific measures, and above all that account should be taken of the special situation of each handicapped child or adolescent. The nature and importance of the disability should be evaluated, along with the possibilities of education and of developing individual aptitudes, following the strategy best adapted to each case. The breaking down of barriers within institutions, the setting up of multi-disciplinary educational teams and the use of varied teaching methods are required.

Integration into ordinary education takes different forms in different countries, sometimes even within the same country, depending on requirements and on the facilities available. Nevertheless all these forms are a response to the same overriding concern: to encourage the development of each child's personality and to ensure his or her eventual integration into adult society. In the article overleaf, a specialist describes the integration process in Portuguese schools today and presents in their own words the testimony of two visually handicapped children.

Photo © R. Zureikat, Amman

The integration of disabled children into the ordinary education system is a goal being pursued in many countries. Alia Zureikat, a young Jordanian girl afflicted with cerebral palsy, attends an ordinary school in Amman. According to her teachers, Alia, here seen holding her younger brother in her arms, is a highly motivated and enthusiastic pupil whose level in some subjects is higher than the class average.

Breaking down the barriers for visually handicapped children

Catia Susana when aged 8

by Maria Adelaide Moreira de Morais Alves

THE social and educational integration of visually handicapped children and young people in schools forming part of the ordinary education system is today the policy of the Special Teaching Division of the Portuguese Ministry of Education and Culture, which is responsible for the education of the disabled. Since the beginning of the 1970s, the Division has followed the lead taken by other countries, notably the United States.

As a result, blind and amblyopic[1] children who were formerly educated in private institutions or boarding schools (where State intervention was minimal), cut off from society and separated from their families, now have an opportunity to attend ordinary schools.

The first step in this direction was the creation of *salas de apoio*, or support classes, in primary and secondary schools in the main cities of Portugal. In these cities were the boarding establishments where the blind and amblyopic pupils completed four years' primary education before entering the secondary schools where support classes had been created. They continued to live either in the boarding schools or at home. The support classes were staffed by specialized teachers who provided pupils and subject teachers with teaching materials and advice on changes in the curricula necessary to cater for the type and degree of disability suffered by each pupil.

1. Amblyopia: dimness of vision without apparent change in the eye structures. *Editor.*

However, this system soon proved to be inadequate. The support classes were few, and the numbers of visually handicapped pupils in them constantly increased until they came to form "colonies" within the schools. The visually handicapped young people stuck together and seldom mixed with the other pupils during recreation periods or in their free time. There was no real social integration.

Moreover, in order to attend these secondary schools, pupils from other cities and from rural areas had to be separated from their families and friends. When these pupils returned home after completing their studies, they were treated as outsiders. They felt uprooted; they had no friends; they had lost touch with their community and had great difficulty in fitting back into it. Many of them, especially those from rural areas, refused to return. They could not face the prospect of going back to the humble homes where they had been born and living among those whose culture and habits were now quite different from their own.

One pupil from a village once said something which shocked me and impelled me to do all I could to change the system. "You bring us here," he said, "to turn us into birds with clipped wings."

It was urgent to solve the problems stemming from the young peoples' isolation from their families and from society. This could only be done by creating the conditions for "full-scale integration", so that visually handicapped pupils could go on living with their families in their home environment and attend local schools like other children and teenagers, use the same public transport facilities, play the same games, and experience the same pleasures and the same problems—in short, be a part of the community.

After the necessary legislation had been prepared, it soon became clear that legislation in itself was not enough. A much more difficult problem had arisen. It would be necessary to change the attitudes of teachers who, through feelings of uncertainty or mistrust, through prejudice or because they were unwilling to put themselves out, refused to accept visually handicapped pupils or, when they did, left them on the sidelines.

This was the mid-1970s, and the struggle was a hard one. Today, with few exceptions to the general rule, the integration of the visually handicapped in Portugal can be said to have become a reality.

Today pupils are integrated into ordinary schools as early as possible, and are provided with support from specialized teachers. Each pupil can be given back-up teaching two or three times a week, depending on the gravity of the handicap and the level of instruction. The teachers periodically advise the parents about their children's education and other activities that may contribute to their balanced development. They also alert parents about the need for regular medical attention.

We cannot claim that everything is perfect: indeed, we are only too aware of our limitations, including a shortage of specialized teachers, the

lack of facilities to produce teaching materials, and lack of funds to purchase better equipment. However, we believe that it was necessary to choose the lesser evil, and the sheer pleasure of seeing our children and young people grow up within their families, be accepted by their fellow pupils, display the same abilities and the same limitations, and become fully-fledged members of the community, strengthens our conviction that we are on the right track.

Boarding schools and special schools have not disappeared. They will continue to exist, especially for the more severe cases of multiple disablement calling for more constant attention and the use of a wider range of techniques. These establishments are working with the support teachers in the integrated education system on developing training methods and organizing vacation courses.

The following remarks illustrate how the approaches described above have affected the lives of two visually handicapped Portuguese children who are integrated into schools in the ordinary education system.

Catia Susana was born with severe malformations in both eyes involving the degeneration of the iris and the cornea. At the present time, she can just about perceive the light. She lives with her parents and elder brother in Santarem, a town some 90 kilometres from Lisbon. At three years of age, she attended nursery school just like any other child and at six went on to the primary school in the area where she lives. She is now in her third year and was nine years old in June. It is clear that she is fully integrated into the school from the way she talks about it and her friends:

"The teacher is good and amusing and teaches well. She is kind, but since I'm a chatterbox she is always telling me to be quiet. She has separated me from the others, but she has put me next to a boy called Rodrigo, and we are always talking to each other. I read to him what I have written and we talk about all sorts of things.

"I learned typing in my second year, so as to be able to write without seeing. I already know how to type, but I can also write in Braille.

"I go to school with my mother, but I sometimes go on my own, with my stick. I know the area well and when I go down the street, I guide myself by the curve of the houses. In the afternoon, when I come out of school, I go home with my girlfriends and we play with dolls, or else I read my stories to them until my mother comes. At other times, I go to a local shop where there is a little dog I like very much, and I also go to visit my old nurse. I don't go out at rush-hours, but if I am a bit late, I ask somebody to help me cross the street."

Catia's parents have learnt to accept her disability and lavish affection on her, without showing either overprotectiveness or rejection.

Catia's intellectual development is superior to the norm for her age, perhaps because she has always received encouragement. Her mother says, "When she was very young, I tried to teach her by reading her all the stories I could lay my hands on and by giving her detailed descriptions of illustrations in the books." This may explain Catia's enthusiasm for reading and writing.

She says: "My favourite subject is Portuguese language and then grammar. ... I write whenever I can, both at school and at home, in prose or in verse, depending on my mood." Her mother says: "Reading is her world," to which Catia adds: "Books make my mouth water because there are so many marvellous stories to read."

Catia spends her free time with her parents and with other friends of her age, goes to the beach or on walks, or stays at home reading, writing or playing with her dolls. She also goes swimming and has already had music lessons. She began by being very enthusiastic because she was very fond of music, but she ended up by losing interest in the lessons because "the teacher was too demanding". Catia is a very determined child: she is a perfectionist and hence she loses interest in anything that she cannot succeed at right from the start. What more could be expected of a nine-year-old child?

I asked her to think of a message for children all over the world. She pondered for a moment and then wrote the following words: "THE SUN. When the sun shines brightly, it makes the blond hair of some children shine too, like the coins they need to live. The sun is a playful figure who gives life to all children and all hearts and brings them together, whether they are red, white, black or yellow. In every country, if the sun shines, then hearts, hands and arms join together to turn the world's children into flowers that will form great clusters of love and friendship."

Renato Jorge is totally blind. His premature birth and very low birth weight account for the many health problems he had in his early years. He lives near Lisbon with his parents and grandparents. He is now twelve years old and is in his sixth year at the Vasco da Gama de Melecas college. He is a happy, high-spirited child who expresses himself easily and precisely.

"Before I came to the college, I was at three other schools. The first of these was rightly called the 'Inicio' (the 'Beginning'). I only stayed there a month because I still felt very ill and it was hard for me to be away from my parents. I had problems fitting in. Then I spent a year with my grandmother, but my parents dropped in to see me whenever they could. When I was four, I went to the A-da-Beja school for two years. From then onwards I remember things better.

"When I was six, I went to the Antonio Feliciano de Castilho Institute in Lisbon, which was a school for children and young people with eyesight problems. The teachers and my schoolfriends were very good to me and really helped

Renato Jorge, aged 12

Photos © M.A. Moreira de Morais Alves, Portugal

me to 'grow' because I was very frail and backward. At the Institute, I had two women teachers who were not only kind to me but were very good at teaching, and aroused my interest in lessons. I spent a lot of time playing with my friends and those who could still see and those who were blind used to play tricks on one another.

"My mother took me to school every morning and collected me every afternoon. There were fewer people at the Institute than at the college where I am now. It was a family affair, whereas my present school is very large. That is the only difference between them, since both of them are equally good. I feel happy in the college where I am now. I like everything about it. The curriculum is well organized and I like the way the teachers treat me.

"I responded at once to the very first lessons because the teachers, who had never had a blind person in their classes before, taught me just like the pupils who had their sight. I have never felt that they make the slightest distinction between me and the others. When they write on the blackboard, they dictate out loud what they are writing and so I have no problem in taking notes. I enjoy all subjects, although I have more difficulties with visual education. However, the teacher makes adjustments when there are things in the curriculum that I cannot cope with. My favourite subjects are history and natural science. I have always been fond of history because I like to understand why we have reached our present situation, good or bad.

"My schoolfriends are very nice. Whenever somebody has a birthday, he invites the others. A great idea! In my free time, I do judo, take music lessons and go on bicycle rides. I have also done some horse-riding. I had to drop it because I did not have enough time, but plan to take it up again. At weekends or during the long vacation, I go out with my parents and friends. I have many friends of my own age with whom I can play, but I also very much like talking to older people because I am always trying to improve my Portuguese and acquire more knowledge. They can teach me the things they have learnt from their own experience.

"At home, I help my mother to dust the house and my father to mend the fence or the cart if necessary."

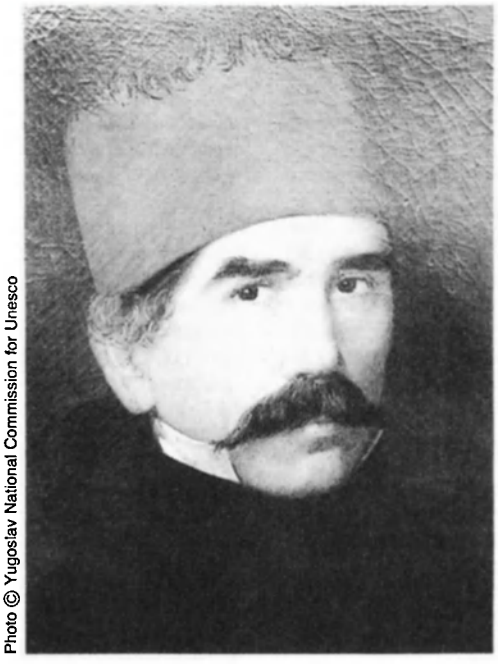
Renato made this long statement almost without a break, displaying admirable self-assurance and equanimity. Whenever he referred to his parents or to other members of his family, he did so with great affection and with a smile on his lips. My final question was whether he too would like to send a message to other young people. He replied without hesitation as follows:

"I should like to say to the readers of this article that if they are disabled, or if they have children who are disabled, they should take life as it comes, as I do. If they do that, they may succeed in overcoming their problems more easily. That is my family's motto and we have had plenty of problems to contend with."

That is the message of courage and hope which visually handicapped Portuguese young people wish to address to the world. By their example, these young people teach us to face life with optimism and to fight for our ideals. ■

MARIA ADELAIDE MOREIRA DE MORAIS ALVES *is a Portuguese educator who is responsible within her country's Ministry of Education for the basic education of visually handicapped young people. She has organized many seminars and training courses to help teachers overcome the problems of integrating disabled children into the ordinary education system and regularly takes part in national and international meetings and workshops devoted to the education of handicapped children.*

Portrait of Vuk Stefanović Karadžić (1787-1864)



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Vuk Stefanović Karadžić

Profile of a great scholar

The bicentenary of the birth of the Serbian writer and scholar Vuk Stefanović Karadžić, who made an outstanding contribution to the culture of Yugoslavia, is being celebrated as an occasion of international significance on 6 November 1987. To honour the memory of this great figure, we publish below an account of his life and achievements together with short extracts from his works.

FATHER of Serbo-Croat literature, great reformer of the Serbian language and spelling system, founder of Serbian Romanticism, linguist, ethnographer and historian, Karadžić played a pioneering role in the cultural history of Yugoslavia.

Born into a farming family at Tršić (Serbia) in 1787, he attended local schools but was largely self-taught. In 1813 he took refuge in Vienna and lived there, except for a few short absences, until his death in 1864.

In Vienna he met a Slovene scholar, Jernej Kopitar, who encouraged him and introduced him to such leading European writers and thinkers as Johann Wolfgang von Goethe, Jacob Grimm, Leopold von Ranke and Friedrich Engels. Karadžić's first collection of epic poems, published in 1814, brought him to the attention of an educated readership. In addition to his many other activities, he devoted his life to the collection and publication of works from the Serbian oral literary tradition, notably in "Serbian Folk Tales" (1821), "Serbian Folk Sayings" (1836) and, above all, the multi-volume "Serbian Epic Poems" (1814-1866).

His efforts to record and preserve the treasures of oral literature formed part of his struggle to gain acceptance for the spoken language as the language of literary expression, and to create an alphabet which would be adapted to Serbian phonetics and would obey his dictum: "Write as you speak, read as it is written." Karadžić simplified the spelling system so that each sound corresponded to a single letter, finally devising an alphabet of thirty letters that is one of the most scientific and logical in the world today.

His linguistic works include the first Serbian grammar—which was reviewed by Goethe—and a "Serbian Lexicon" (1818), a Serbo-Germanic-Latin dictionary which did full justice to the rich vocabulary of popular speech. The second edition (1852, reprinted in 1934) remains a classic reference work.

The translation of the New Testament into the popular idiom that Karadžić completed in 1847 laid the foundations of the Serbo-Croat language, which was to become the common tongue of the Serbs and the Croats.

Karadžić was a revolutionary figure who sought to bring about the political and spiritual awakening of his people through books. As well as his efforts to create a national language and a new spelling system, he produced a body of historical and ethnographic works, which, especially in his "The Serbian Revolution" (1829) and "Montenegro and the Montenegrins" (1837), are dominated by his realistic vision of social relationships and by his sense of perspective.

During his lifetime Karadžić achieved a European reputation. In 1823 he was the guest of Jacob Grimm in Kassel and of Goethe in Weimar; the same year he received an honorary doctorate from the University of Jena. In 1824 he became a member of the Turin Society for Antiquities and, in 1825, of the Göttingen Learned Society. In 1842 he was awarded a gold medal for his scholarship and literary achievements by the Russian Academy of Sciences. He became a corresponding member of the Viennese Academy in 1848, the Berlin Academy in 1850 and the St. Petersburg Academy in 1851. He was also a corresponding member of the Paris-based African League for Combat Against Slavery.

Karadžić owes his greatness not only to the originality of his ideas and the tenacity with which he expressed them, but also to the links he made between the traditions of his people and international culture: as a thinker he made a major contribution to the spiritual unity of mankind. ■

Write as you speak, read as it is written.

(Preface to the "Serbian Grammar", 1814)

As long as the spoken word of the people is pure and unaltered, literary language should not be distinct from the language of the people. Why should it be different? Don't we see people in our time discarding the literary language of the past in order to write in the language of the people as it is today? ... Please God that we should be able to write books in the way that the people speak ...

(Correspondence, 1845)

I am convinced that my efforts and my task will be appreciated by all our writers and authors who love the language of the people and respect it as the most precious possession of the people, for whom they wish happiness and progress. On the other hand, I have not tried to please those who, while speaking the Serbian language, heap abuse on it and claim that it is worthless and no more than a tainted language, the speech of swineherds and horse-traders.

The greatest outcry will be raised against the spelling system. But here too I hope that all our writers will be on my side, all those who are familiar with language and writing. And they will see that this is the most appropriate way to write the Serbian language.

(Preface to the "Serbian Lexicon", 1818)

A man with nothing else to do could easily devote his whole life to bringing together all our folksongs, our stories, our tales, our riddles, our customs and our words. And when he came to think he had finished the task, he would see that he was only just starting. ... These works of folk art must be collected before they are altered or even stifled by new, more "enlightened" fashions.

Songs, riddles, folktales, these are a highly accomplished form of popular literature, to which there is nothing to add. They should simply be collected and their purity should be scrupulously respected. And when transcribing these tales, it is certainly advisable to think of the construction of the words (not, I repeat, according to one's own taste, but following the genius of the Serbian language) so as to avoid any form of excess, and to succeed in such a way that cultivated souls can read them and uneducated folk can listen to them ...

(Preface to "Serbian Folk Tales", 1821)

Our folksongs can all be divided into epic poems, sung to the accompaniment of the *guzla,* and women's songs, sung by women and girls but also by men, most often youths singing in unison. More than the women's songs, the epic poems are intended for a public, hence the utmost importance of their text.

(Preface to "Serbian Epic Poems", 1824)

Our Serbian folksongs do not come from parchment manuscripts, they were collected from the warm lips of the people; they are not old because they have never yet been recorded in writing, but they will certainly live to a ripe old age ...

Jacob Grimm

(Review of the third volume of "Serbian Epic Poems", 1823)

Mother and daughter

Aie, aie, aie, mother, a monk is wakening me,
He is wakening me, kissing my eyelids!
Must I kiss him, oh my mother?

Kiss, my daughter, do not be damned!
When your mother was the same age,
Before dawn, she had embraced nine,
And your father, he was the tenth,
And she had woven three lengths of carpet!

(Traditional poem collected by Karadzic and published in "The Red Duke" [erotic folk poems], Prosveta publishers, Belgrade, 1979)

Photo © Yugoslav National Commission for Unesco

Yugoslav postcard showing the thirty letters of the Serbian alphabet as devised by Karadžić, in upper and lower case. The six boxed letters are those which he added to correspond to sounds in the spoken language which formerly had no graphic equivalent. His signature appears below the alphabet.

Article and selection have been compiled from material provided by Marija Bišof, author of *Vuk Stefanović Karadžić—Bicentenary 1787-1987,* a quadrilingual (English, French, German and Russian) brochure published in Belgrade

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A world congress on copyright teaching

by Yves Gaubiac

UNESCO is holding a World Congress on Copyright Teaching and Information in Paris in September 1987 in order to mark the thirty-fifth anniversary of the Universal Copyright Convention, which was signed on 6 September 1952 and the secretariat of which is provided by Unesco.

The theme of the Congress, which is directly related to Unesco's mandate in the field of education, has been chosen because many infringements of copyright are due to lack of information and knowledge.

The provision of information and education about copyright is an indispensable part of any effort to ensure that copyright is respected. The idea of literary and artistic property is not universally shared. There is no basic reflex relating to justice and equity for creators. Education and training are needed in order to create this reflex. Once in circulation, created works are often seen as common property which can be freely used. Works should certainly be circulated as widely as possible, in order to satisfy people's legitimate desire to enjoy the creations of the mind. But the use of a work without its author's consent and in the absence of any remuneration is harmful to creative activity since it deprives authors and their rights holders of the financial resources necessary to create and invest in the production of new works.

Copyright is recognized in the Universal Declaration of Human Rights of 10 December 1948, which states that "Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author".

Copyright is now an accepted right. It should be more widely known if it is to be more widely respected. ■

YVES GAUBIAC, *of France, is a consultant with Unesco's Copyright Division.*

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The Education of Children and Young People who are Mentally Handicapped, by Dorothy M. Jeffree. 79 pp., 1986; **Working together,** Guidelines for partnership between professionals and parents of children and young people with disabilities, by Peter Mittler, Helle Mittler and Helen McConachie. 63 pp., 1986; **Testing and Teaching Handicapped Children and Youth in Developing Countries,** by David Baine. 63 pp., 1986. Nos. 1, 2 and 3 in a new series of "Guides for Special Education" published by Unesco. The guides, which are available free, are intended for teachers, parents and community workers. Their aim is to stimulate discussion on basic knowledge, methods and techniques relevant to the education of disabled persons, and offer practical advice for action in this field. Nos. 4 and 5 in the series, **Education of Deaf Children and Young People,** by the Centre for Total Communication, Copenhagen, Denmark, and **Language and Communication in the Education of Handicapped Pupils,** by A. Labregère, will be published later this year.

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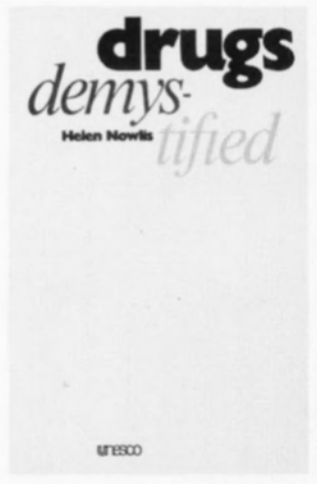
Unesco publications on drugs

Drugs demystified

by Helen Nowlis



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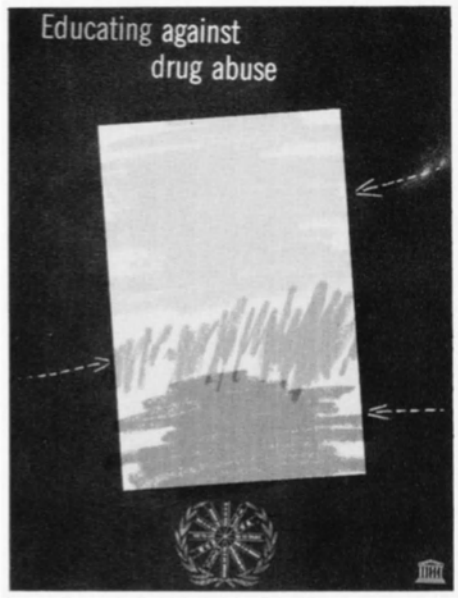
Published in ten languages, *Drugs Demystified* is essential reading for all parents and educators. Contents include:

- Drugs and their effects
- Drug use and drug users
- The social context
- Strategies for prevention

Educating against drug abuse

Preventive action against the abuse of legal and illegal drugs concerns everyone, especially parents, teachers and those who are closely involved with vulnerable persons and groups. Illustrating the theoretical approach with specific examples, Unesco has compiled this new publication which describes attempts in different parts of the world to solve problems associated with the use of legal and illegal drugs.
Also described are various approaches to prevention work which have been developed as a result of international co-operation.



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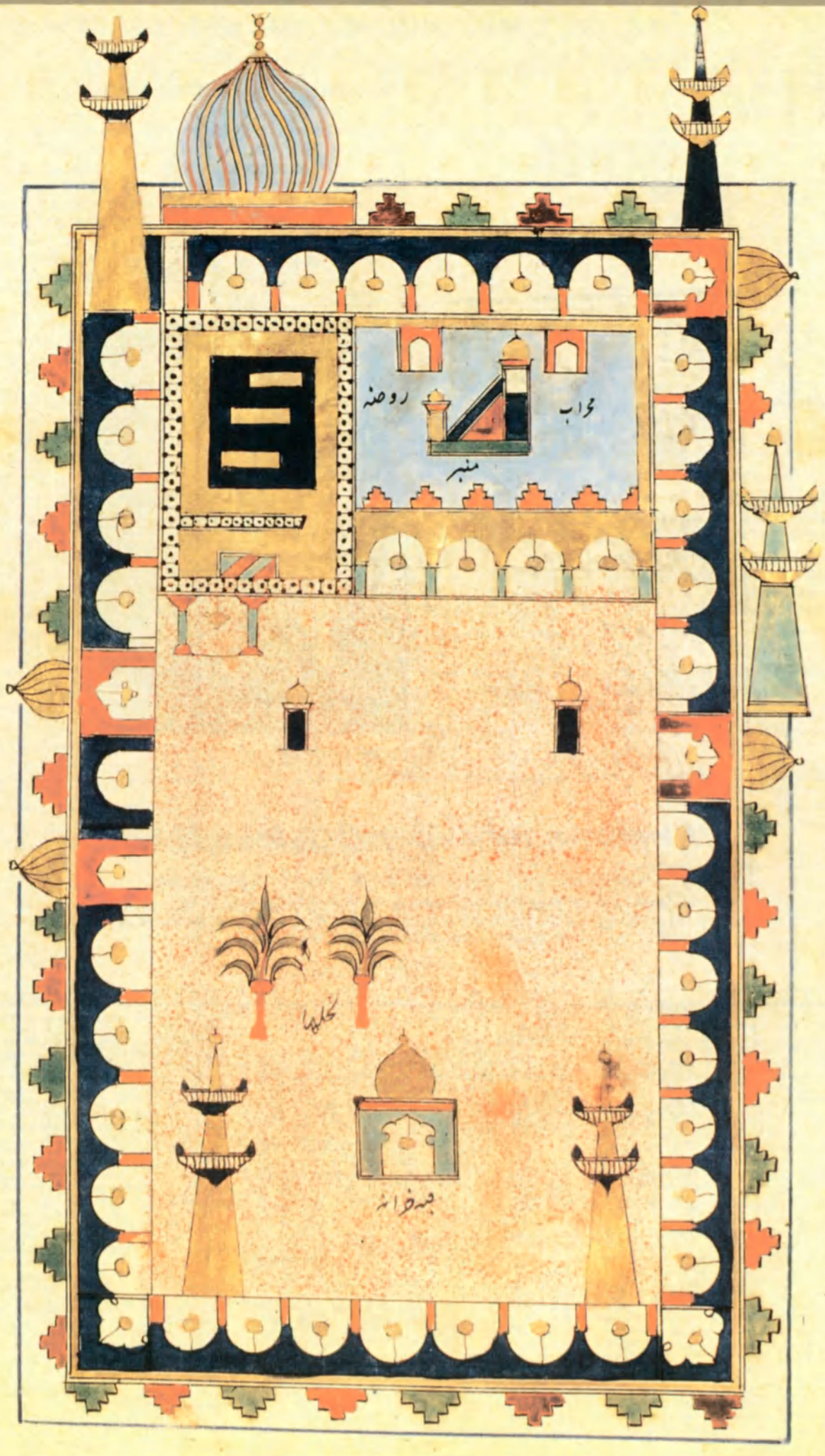
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